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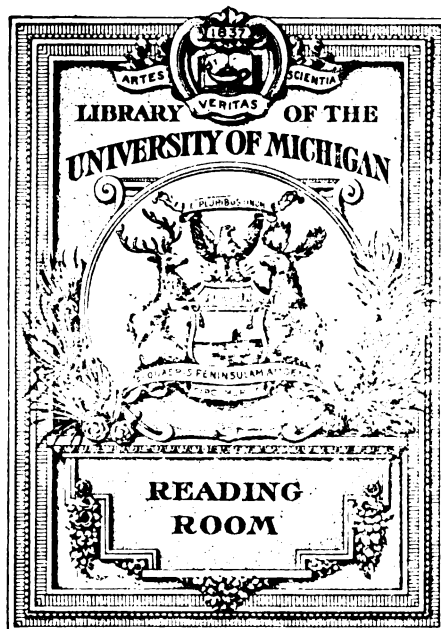
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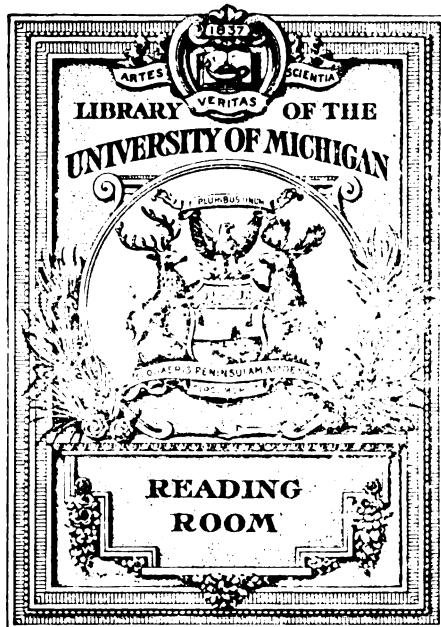
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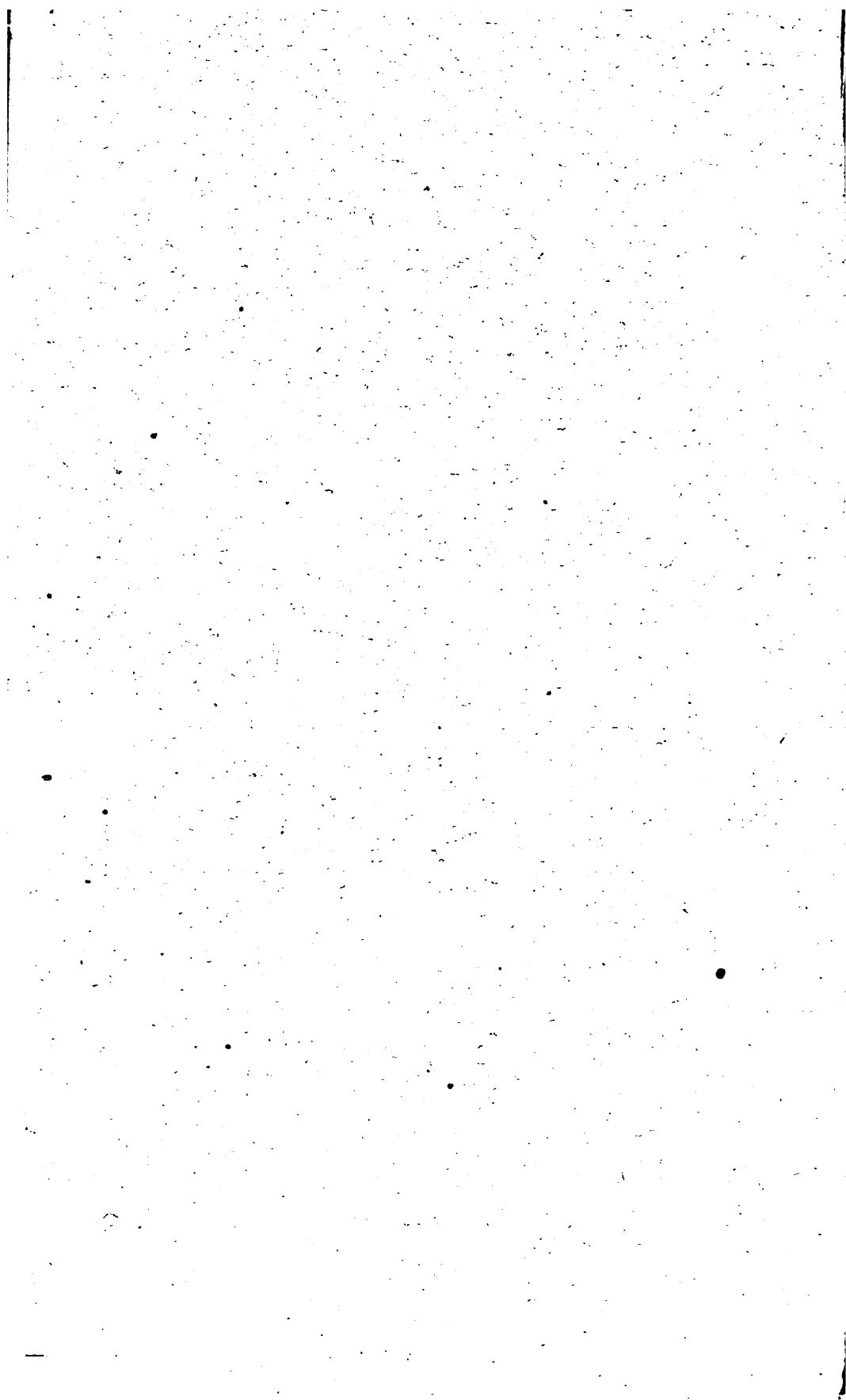
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IMITATION IN EDUCATION

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ITS NATURE, SCOPE AND SIGNIFICANCE

BY

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TABLE OF CONTENTS

	PAGE
INTRODUCTION	7
I. THE NATURE OF IMITATION	9-21
1. Examples of imitation	10
2. Two kinds of imitation	12
3. Conscious and unconscious imitation	16
4. Imitation and originality	16
II. THE SCOPE OF IMITATION	22-37
1. In history	22
2. In religion	24
3. In politics	25
4. In art	26
5. In literature	31
6. In society	33
7. In science	37
III. THE SIGNIFICANCE OF IMITATION	38-94
1. What has been thought of imitation	38
2. Imitation among children	41
3. Imitation among students	44
a. Questionnaire I	45
b. Questionnaire II	47
4. The training of teachers	52
a. Questionnaire III	54
b. Questionnaire IV	61
5. Imitation in teaching morality	70
6. Imitation in learning language	74
7. Imitation in composition	76
8. Imitation in the acquisition and application of method.	83

	PAGE
9. Imitation in learning	86
a. Interest	87
b. Sympathy	90
c. Assimilation	91
d. Emulation	93
1. Dangers and limitations of imitation	94
2. Summary	97
3. Bibliography	100

IMITATION IN EDUCATION

Its Nature, Scope, and Significance

INTRODUCTION

THE plan for the subject-matter of this paper is to consider these three topics—the nature, scope, and significance of imitation—in the order here named. This separate treatment of these topics will be observed in the discussion of the nature of imitation more than in that of the other two. Yet, in discussing the nature of imitation, something of the significance must appear, as in the last section, which considers the nature and development of originality; in that section of the paper much of the significance of imitation may be seen. Each of the other two topics will involve some consideration of the preceding topics. The scope of imitation will bring out its nature and significance to some extent; the significance of imitation will show much of its scope, and especially illustrate the nature of imitation.

The purpose of this study is to find and set forth something of the practical value of imitation in education. An attempt will be made to show that imitation is more fundamental in our human nature than we are disposed to grant; that the nature of intelligent imitation is such as not only to admit of, but even to contribute in large measure to the development of the higher powers of mind; that its scope is limited to no class of thinkers or doers, and to no particular field of activ-

ity; that its significance in education is of more importance than has generally been recognized by teachers; that imitation in education has a sound practical and psychological basis, and that it should be ranked and used with the more valuable means of securing mind growth.

I

THE NATURE OF IMITATION

THIS paper does not pretend to analyze psychologically the process by which the example of one person influences the conduct of another. We seek only such a conception of the nature of imitation as shall describe the facts whose importance in life, particularly in education, we are trying to ascertain. We may say roughly that there are two kinds of imitation—instinctive in the lower animals and intelligent in man. The child, so far as its intelligent manifestations are concerned, till it is about six months old, does not materially differ from the lower animals. Its first imitative acts would be more instinctive than intelligent. Some doubtful cases of imitation have been cited much earlier than the sixth month. Darwin thinks he noticed his son imitating sounds at four months old, but he was not sure of any positive imitation until the sixth month. Tiedmann noticed his son, at four months, making movements with his mouth when he saw any one drinking, as if he were tasting something. Preyer observed his child of seven months laugh in response to those who smiled at it. In each of these cases, the instinctive tendency was prominent. That is, the child did nothing in these cases that it might not have done about that age and in about that way without a model from any one. These and such acts as these, where the instinct undoubtedly plays a large part, we shall call instinctive imitation.

It is about the sixth month, however, that intelligence begins to appear in the child and its imitative acts become

more and more intelligent and less instinctive. ¹Preyer observed his child at fifteen months try to blow a candle out after it had seen some one else perform the act. This is an example of intelligent imitation in one of its simplest forms. It is close to the border line, close to copying and mimicry, and partakes largely of the mechanical which is always found in the simpler and earlier forms of children's imitations. It is not instinctive, however, since instinct alone would not have prompted the child to blow out the light and the child would not have done so without the model—seeing some one blow it out.

A higher form of imitation is illustrated in a child dressing and caring for her doll. Here the model is adapted somewhat by the child to her material. The imagination comes in and supplies what does not comport with the external model. Of a similar kind is a case cited by ²Mr. Small. This boy had seen some men putting in a system of electric lighting. On his return to his home, the boy drove sticks into the ground and stretched ropes about the porch and windows and climbed the posts to arrange and mend the lines as he had seen the line-men do. This case of imitation is of a little higher order than that of the child with the doll. It required some more imagination to reproduce the model, more selection of elements and adaptation.

Another example of imitation may be taken from a teacher. In this case, the teacher had occasion to be under the tuition and see the work of a skillful and efficient instructor. The method of the instructor, his manner of questioning his pupils, management of classes, skill in illustrating and developing the subjects, his calm demeanor and self-possession, his interest and zeal in subjects and for his pupils, greatly pleased the teacher. When the teacher began school work again, he took

¹ *Senses and Will*, p. 288.

² *Pedagogical Seminary*, 4; 20.

this instructor as his model. By close application, selection, and discrimination, the teacher acquired much of his instructor's skill and power for teaching. But by a slower, more pains-taking course, the teacher, who was not naturally calm, self-possessed, nor given to manifest interest and enthusiasm, found himself becoming like his instructor in these things. The teacher continued to try to emulate the model instructor until self-possession and enthusiasm in his school work became natural and fixed in his character. He no longer needed to be on his guard at every point in these matters. This example of imitation is still of a higher order than that of the boy putting in the electric lighting. The point of chief note here not found in that of the boy is that the teacher reproduced in himself the inner state and condition of mind in the instructor and acquired them by imitation.

In these three examples cited, the model was obtained chiefly by seeing it, by being brought into contact with it. I now wish to give two examples of imitation where the model is obtained not at all, or only indirectly, through sight. Recently I heard a Sunday-school lecture. The lecturer said in his introductory remarks that he had learned of a certain clergyman who used candles to illustrate his Sunday-school lectures. The lecturer whom I heard stated that, upon learning of the candle method, he said to himself, "The plan is a good one, I can do that." So he set to work and got up his outfit to illustrate the points he wished to bring out before the school. This was an imitation, and at the same time highly original. It was an imitation in that the model was obtained from another person and suggested the general plan and purpose. It was original in that the model gave but a bare outline. The details had to be chosen and the model perfected by a process of synthesis. It had to be constructed. It was built up by imagination after the judgment had approved of the elements chosen. The vague model was brought out in clearness by addition and combination of elements.

The other and last example of imitation I desire to give is of a somewhat different kind, though similar to the last named. In this example, as in the last, the model was not obtained directly from the one imitated. It differs, however, in that none of the exact data of the model is found in the imitation. This is an example where the model is a method of doing something. The method is imitated. Mr. Edward Dowden¹ saw two of the Literary Portraits of Sainte-Beuve side by side in a picture gallery. The portraits were those of Mathurin Regnier and of André Chenier. The poets represented by these two portraits were of two distinct types. Their poetical spirits and systems of thought and feeling were unlike. They represented two poles on the world of poetic lore; the one was the complement of the other. The two portraits placed side by side represented a comparative study of the two poets. This method of the painter served so well its purpose—to bring out in bold relief the essential characteristics of the two complementary literary characters—that Mr. Dowden said he would adopt the method. This he did in his study of Tennyson and Browning, and we have his excellent essay on these two poets: "Mr. Tennyson and Mr. Browning—a Comparative Study."

These examples of imitation may be shown to exhibit the chief characteristics of both the instinctive and the intelligent types of imitation. Those referred to before the sixth month of the child's life are of the instinctive type. The model or the action that called forth the activity of the child simply turned the child-like impulse in a given direction at that time. The child did only what it might have done, or what at least it was able to do without the model. Such may be called imitative only from the objective point of view. To the observer, this seems to be imitative; it is not such, however, from the child's point of view. The child did not in any sense whatever delib-

¹ *Studies in Literature*, p. 191.

erately set about to do the thing cited in any of those cases. His action was objectively imitative; subjectively it was instinctive.

This instinctive response is seen later in the life of the child and even in the adult, and must be distinguished from subjective, intelligent imitation. It is often found so closely blended with the intelligent imitation as to render discrimination between the two kinds difficult. You may observe it in the behavior of the child when you extend your hand to greet him. I have found upon trial that most children who have not formed the habit of giving the right hand and who at the time are not, as it were, on their guard, will give the hand opposite the one you extend. That is, they will give the left hand in response to your right and the right to your left. In these cases the responses were instinctive. The child simply imitated the model set before it in a reflexive way. It is only when the child has learned to inhibit the instinctive impulse or when such inhibition has resulted in habit that it responds to your greeting after the established form.

This same kind of imitative tendency is noticeable in the adult. Some one laughs, others present do the same without knowing the cause of the laughter, or why they themselves laughed; or some one coughs, others do the same without having any other occasion for so doing except that the model was set, and as it were they followed suit.

It is probably true that intelligent imitation has its origin in instinctive imitation. Human intelligence is thought to have its beginnings in instinct. Instinctive behavior forms an important part of the raw material on which intelligence exercises itself. The intelligence fashions and moulds this raw material and guides the activities concerned to finer issues in individual adaptation. Thus, beginning with a congenital and instinctive imitative tendency, the intelligence may later utilize that tendency as the basis of imitation of the intelligent type.

The first example of intelligent imitation—the child blowing

the candle out—is not cited because intelligence is thought to manifest itself in the child for the first time. There may have been earlier many other intelligent acts, but this one is clear. There is no doubt to which category it belongs. Yet, while it is well marked off from instinctive imitation below, it is quite easily distinguished from the next example—the child dressing the doll or the boy putting in the electric plant. It was not necessary to have in the mind of the child the image of the one setting the model or of the child's self blowing the light out in order that he himself might be able to blow the light out. The knowledge the model gave the child was sense knowledge. The knowledge was almost wholly of the perceptual kind. It was presentative knowledge as opposed to representative knowledge. There was no distinct image in the mind of the child of what it would do in blowing out the light. The model was, so to speak, outside the child's mind, as any sense knowledge or perception may be described as being outside the mind; for example, the child, seeing its mother, has no idea, no image of the mother in its mind.

Now, in the second example, there is a distinct advance towards a higher form of knowledge, or what results from sense knowledge. The boy saw the men put in the electric plant, or the girl saw the mother making the clothes and putting them on the children. These things seen left an image in the mind of the children. The model now is within the mind. It is an idea that is to be acted out, to be expressed. It is very important in a proper understanding of the nature of imitation to make this distinction—the model as sense knowledge outside, as it were, of the mind, and the model as ideational knowledge, an image within the mind. It is only when the model is an image in the mind that anything akin to originality may be looked for in imitation.

This introduction of the new element, originality, in imitation appears more clearly in the next example cited. It is not so apparent in the case of the teacher, At least we have no

account of it given. Originality may not have been present in the imitative process. Yet originality is here made possible after the teacher has well formed the habit of behaving after the manner of his instructor. Energy is then released to pursue new courses. In the example of the Sunday-school lecturer, sense knowledge does not at all appear in the model as obtained from the clergyman. The end to be attained was as in all originality, a guide in building up the new model. The means and the end were not so apparent as in the former examples. The means had to be supplied more largely in this case; and the mind was more free to adapt the means to the end. The vague model became vivified in the process. This model was tested by imaginary trial, changed where defective, and finally the perfected model was acted out. It should be noted that in these examples cited above the process is progressive from the first to the fourth. The progress is from presentative knowledge to representative knowledge. It is from perceptual model to ideational model, from a well defined to a less well defined model which is modified and adapted to secure the desired end. In the next example, this progress from the more concrete to the less concrete obtains in a still larger sense. The model is less well-defined to begin with. Mr. Dowden saw the portraits which gave him the artist's method or model of making the comparative study. The model was not complete at first. It had to be filled out as in the last example. Just what the artist had in mind, Mr. Dowden must supply to a considerable extent from his knowledge of literature and literary men. Then this model, which was a method of doing something with the brush, must be carried over into literature and adapted to the pen. It ceases to be a painted image in the mind; it becomes a word picture. Instead of the painter's ideal, it becomes the ideal of the man of letters. The model has become an ideal such as the author may not attain but towards which he may strive. He may have all the essential characteristics—even their

shades of differences of thought and feeling—in his ideal model. They may stand out clear and distinct to Mr. Dowden but he can never give a word picture of Tennyson and Browning as clear as the one he sees in his model. His model has become an ideal because of the material of which it is formed and because of its being beyond his power of attainment. Owing to this nature of the model, including in its reach all stages of mind activity from sense knowledge to ideal conceptions, imitation, which is the acting out of the model, embraces a large range of mind activity. It is an essential element in all originality except possibly the purely creative.

Imitation cannot be described as wholly conscious. We imitate many times unconsciously. It is true we often imitate with set purpose, have the model as such in our minds; but this is not always true. I doubt whether it is true in most cases of imitation. The fact that we find ourselves continually imitating what we would prefer not to imitate disproves the proposition that we always consciously imitate. Besides, I have found many cases of imitation in other persons where the imitator was not conscious of it as such until after it was pointed out to him. Much of our imitation may be detected only after the act has been performed by close analysis of our conduct and by close introspection and discrimination of our own past mental operations and method of procedure. Even then much will escape our notice. Many of our models are secured long before the opportunity to realize them presents itself, and we forget where and how we got them. In such cases we are apt to claim originality.

Imitation as an element in originality has been referred to. It will now be necessary to inquire somewhat briefly into the nature of originality to see what elements of imitation are found in it. This is the more incumbent upon us since the educational significance of imitation does not depend so much upon the lower limitations of imitation—its origin, for instance,

as it does upon its upper limitations, its possibilities of leading to what is called originality in thought and action. Most persons admit that imitation has some value in the early life of the child. Very few, however, agree that it has any considerable significance for the adult. This, I take it, is an error due to lack of close discrimination. The adult as well as the child, the genius as well as the man of mediocrity, has his model. The absence of model on the part of the genius is not the thing that marks him off from the rest of mankind. On the contrary, he has his model, just as surely as the proletarian in thought has his model. The difference between two such persons consists in the difference of manner in using such models. The genius thinks his model over, colors it with his own individuality, his own personality, and thus conceals it from ordinary observation; yet imitation is the important element. It is simply of a higher order, more synthetic, more constructive in nature. Those who are not included in the number of imitators are so few compared with those who do imitate that they do not affect the significance of imitation in education. It has been well said that for these few such education as one person may occasion in another is very little. Most that may be done for such persons is of a negative rather than of a positive nature.

The very small number of such illustrious persons may be seen by consulting ¹ Mr. Galton's "Hereditary Genius." By a very careful study of distinguished men of various periods and countries, he found that one man in 4000 may be called eminent and that not more than one in a million, or in many millions, sometimes, may be called illustrious. The terms eminent and illustrious are not applied to men who have become noted by some single act or by some official position. They refer to men who have attained and can maintain their distinction whatever their position in society may have been or may be in the future. Mr. Galton characterizes such men as possessing

¹ *Hereditary Genius*, p. 9.

three separate qualities—intellect, zeal, and power to do work.

¹ In cases of originality, there must be an active turn of mind or a profuseness of energy put forth in trials of all kinds. There must be a disposition to try experiments not unlike a fanaticism for experimentation. Profuse, active vigor let loose on a field which has increasing charm for the mind, results in human nature surpassing itself. Then we have originality, invention, discovery. ² These original men and women, the marvelous flowers of the race, do not appear by chance or by miracle, but represent the crowning point of a long past. They synthesize the greatness of their time and of the race. Invention and discovery are always the result of a long series of anterior inventions and discoveries. The geniuses build an edifice with the stones that others have hewn. Invention is only the crowning stroke. ³ No elements of representation can get into consciousness except as they have already been present in some form in presentation. The activities of consciousness are always conditioned on the content of presentation and representation present at a given time. Imagination is constructive, not creative. Types of imagination differ only in the amount of novelty introduced—the lucky associations formed in discerning fine distinctions in the contiguous or in the similar. ⁴ The man of originality differs from the merely mechanical man in his imitative tendencies just in the same way that he differs in his thinking from such a man. The two types of mind are separated by a very wide gulf which at the same time is very narrow. A mere matter of difference in direction of nerve-currents might produce opposite results. It is a matter of association of ideas that marks off the man of

¹ Bain, *Senses and Intellect*, p. 610.

² Le Bon, *Psychology of Peoples*, p. 200.

³ Baldwin, *Social and Ethical Interpretations*, p. 90.

⁴ James, *Psychology*, II; 325.

originality from the man of commonplace thought. In the latter, we have a mind that deals only in habitual contiguities or similarities; in the former, we have a mind that deals in rare and keenly discriminated contiguities and similarities. Now, something analogous to this is found to hold true between the two types of mind in the matter of imitation. The mechanical mind discovers and uses only the perfectly apparent models for imitation. The model is followed almost literally. There is little adaptation. The original mind has the sagacity to see the finer issues in the model, to see where new elements may be added or old ones modified. The associations in such a mind take in the novel, make unaccustomed connections. The model becomes a vitalized thing; the model changes, grows, and becomes an ideal.

Originality as shown in the psychology of ¹ invention illustrates the common elements found in imitation and in originality. Inventions may be divided into two psychological types,—the one creative, due to spontaneous and novel synthesis, the other developing an old form—a distinct model. An invention is a new systemization of psychic elements. Every intellectual creation, whatever it may be, literary, artistic, scientific, or industrial, consists in the development of a synthetic idea furnished by new combinations of elements already existing in the mind. The invention is the reaction of the mind upon some given circumstances, and it depends for its results upon the nature of the reacting mind. The model is often presented to the mind in some unlooked for manner. The sagacious mind seizes it and develops it by a synthetic process. The first idea M. Daudet had of "Froment Jeune" came to him while seeing a play in a vaudeville theatre. The first idea M. Massenet had of his "Roi de Lahore" was received at the sight of a simple Indian chest. Roger Dumas gives in some detail how his mind was prepared

¹ F. Paulhan, in *Revue Philosophique*, 45; pp. 225-258.

to write "Tristesse de David." Mr. Dumas saw a painting of David, old, sorrowful, in a reverie upon his throne, with the sun setting. The author tells how he filled out in his mind the whole intent and purpose of the painter, how he added other images to this one central image—the model, how he changed and recombined the elements of his mental images, until finally his subject "Tristesse de David" came out of this "hatching" process. Having his subject, he continued to take note of the images that seemed best suited for his theme until he reached an image that would fittingly close his literary work. Then he selected and arranged his images to form his perfected model.

Many other examples might be cited, including almost every form of invention and scientific discovery, such as the air brake suggested to Westinghouse by an account of compressed air used in piercing a tunnel. Practically the only kind of invention or discovery in which imitation does not figure largely as an element, is that kind hit upon by trial and error, continued experimentation. A good example of the last named kind is found in Mr. Goodyear's invention of vulcanized india-rubber. In this case, and in similar cases, the inventor simply tried one experiment after another until a happy hit was made. It can not be said that he had a model in mind and worked it out to perfection. But in all or most of the cases where originality is manifested imitation is an important factor. Where the invention is a development, imitation of successive models may be called the chief factor in the process; where invention is constructive, the elements are already in the mind, and the model is fashioned by the synthetic process and realizes itself in imitation of the model.

To support the position taken here, I wish to give a quotation from a history and description of remarkable inventions. The passage to be cited does not use the term imitation, but it may be clearly seen that the process of invention, or the means of developing originality, consists in intelligent selection

of models and in constructive imitation of such models. ¹"To enable us to appreciate properly the gradual advances that have been made in perfecting any invention, it is necessary to consider its distinguishing features. In steam navigation, for example, it will be found that the amount of novelty to which each inventor has a claim is very small, and that his principal merit consists in the application of other inventions to accomplish his special object. The same remark will indeed apply to most other inventions; for the utmost that inventive genius can accomplish is to put together in new forms, and with different applications, preceding contrivances and discoveries, which were also the results of antecedent knowledge, labor, and skill."

¹T. C. Bakewell, *Great Facts*, p. 7.

II

THE SCOPE OF IMITATION

THE scope or the extent of imitation in the world at large is much greater than we are usually disposed to think. A fair appreciation of this factor in the institutional life of society, will indicate how large an influence the imitative tendency and the imitative ability should have in one institution of civilization—the school. I can not here give more than a few examples from history. And yet, these will go to show something of the range and scope of imitation, and to suggest what a more exhaustive account might contain.

The history of the world is one panorama of imitation. The more carefully and minutely the study of history is made, the more apparent this fact becomes. In this historical sketch, I shall cite only those nations and peoples who have been prominent in the affairs of the world. These will exhibit the intelligent type of imitation of which we are now speaking. I shall choose a few of the many notable examples from people of recognized, high intellectual types. The Hebrews may be noted first. It is a matter of record that the nation became a kingdom in imitation of the neighboring nations. Any one who will make a comparative study of the ancient oriental religions will not fail to note the striking similarity between the Hebrew religion and the other religions of that region. The origin of much of the Hebrew belief and practice can be distinctly traced to other religions. This does not take any account whatever of the many lapses into idolatry which were due almost wholly to imitation. It must be borne in mind that the Hebrews were a strong, vigorous, intellectual people.

They were peculiarly hedged about to prevent this very thing, to keep them from imitating in government and religion. With all this, there is no better example of the power and significance of imitation. Just how much the Greeks followed other nations and peoples in the development of their government, religion, and art is not easily determined. It is a fact, however, worthy of note that there were but two models in Greece for the Greeks. Sparta and Athens set the pattern for all the other Greek states and for the colonies. Rome has been called the nation of borrowers. It would be more nearly correct to call the Romans the nation of imitators. The significant part they played in the world's history is due almost wholly to their remarkable imitative tendency and ability. They possessed great ability for imitating. Yet, they contributed largely to the progress of humanity. The Greeks and Romans have been models in art, literature, law, etc., for all the world. History is full of the accounts of those who have tried to restore Athens and Rome. The dream of Charlemagne was of this nature. For a thousand years the Holy Roman Empire of the Germans was an imitation of Rome. The Roman model still lives in the German schools, laws, and government. The Crusades were one vast imitative enterprise. The epidemic extended from children to the aged, from the most simple-minded to the most acute thinkers of the time. Even after the fanatical craze was over, after the imitative tendency had expended itself, deliberate imitation continued in the military and commercial enterprises. The feudalism of the Middle Ages had its origin, as an institution, and its growth in imitation. It remains to-day in our "spoils system." That very astute and far-sighted warrior and statesman, Peter the Great, said, when he was defeated by the Swedes, that they had simply taught him how to beat them in later engagements. Peter the Great founded his empire by imitating other nations. The remarkable development and recently manifested power of Japan is due to its ability and

disposition to imitate western civilization. When Prussia in 1870 defeated France, the latter immediately began to repair her loss and to render a similar disaster less possible by imitating Germany in her public education. Our own constitution, said to be the most original ever framed, contains no new elements. Every essential feature may be found in European governments. There was simply a new arrangement, a new synthesis of the old. Our state constitutions are modeled after our national constitution—an imitation of it. The motive force in modern labor organizations and of trusts and "combines" is to be found in the tendency and ability to imitate. One class of laborers organize, or one industry is formed into a trust; the result is seen, and the process is imitated.

The influence of imitation in religion is too apparent to need more than a mere reference. There is probably not one person in a thousand, who deliberately chooses his religion from among Christianity, Mohammedanism, Buddhism, etc. Even among Christian denominations, there is probably not more than one in a hundred whose membership is not determined by imitation of parents or of those with whom he is associated. The imitative tendency in religion is strongly marked by American religious epidemics, usually termed revivals. In 1800 a religious epidemic spread rapidly in this country. In Kentucky, a camp-meeting was held at Cabin Creek. It lasted four days. People were seized with fits of crying, singing, praying, shouting. All the people in that vicinity were drawn into the maelstrom as if by magic. One man thus describes the scenes: "The laborer quitted his task; age snatched his crutch; youth forgot his pastimes; the plow was left in the furrow; the deer enjoyed a respite upon the mountains; business of all kinds was suspended; bold hunters and sober matrons, young men, maidens, and little children flocked to the common centre of attraction." This is simply an example of what occurred at other places and at other times, as in New Haven and New York in 1832.

Commercial epidemics illustrate the force of imitation in a slightly different form. This is seen when a run is made on a bank or when some speculating scheme is set on foot. It has been well said that ¹"men think in crowds and go mad in herds." The tulip craze in Holland, the South Sea Scheme, the Mississippi Scheme are well known examples. In these examples, imitation, at least intelligent imitation, is not the only factor, but it is one of the operating influences.

In politics imitation is quite as prominent as in religion. Most men vote the ticket of their fathers or at least find themselves more closely allied with the party of their fathers, than with any other party. This is very noticeable where children of the same parents are separated and brought up by other people. In such cases the boys ally themselves, in nearly every case, with the party to which their guardians belong, and if these happen to belong to different parties, the brothers will be of different political faith. I recently collected a few data to find to what extent men do imitate their parents in this matter. I gave two questions to a number of college men. All the men are college graduates, a number are college professors. The purpose in selecting this class of men was to get those who would be most likely to break away from parental influences. If the answers do not represent the facts, I think the error is on the negative side—on the side of those who do not vote as their fathers. The reason for this belief is, many men whom I approached on the subject were somewhat sensitive on the question. They would at once see the import of the questions and manifested a dislike to be reckoned with those who imitate in anything. They are like most men in desiring to be among the thinkers, "the eminently original." The two questions were: (1) Do you vote the same party ticket that your father votes? (2) If not, do you find yourself more closely allied

¹ Sidis, *Psychology of Suggestion*, p. 343.

with the party of your father than with any other party? To the first question, 33 answered yes and 17 no. To the second question 9 answered yes and 8 no. The number of men to whom these were put was 50. Thirty-three or sixty-six per cent. voted the party ticket of their fathers; seventeen or thirty-four per cent. did not. If the nine who answered in the affirmative to the second question be added to those of the first question, we have forty-two or eighty-four per cent. who do vote as their fathers against eight or sixteen per cent. who do not belong to the party of their fathers. These last eighty-four and sixteen per cent. respectively, represent the facts, because an affirmative answer to the second is practically the same answer to the first. It is certainly true that if men were promiscuously canvassed, the per cent. of those adhering to the paternal party would be much larger. This on a small scale represents the influence of imitation in politics. It is not at all probable that all these men or any considerable number came to their present convictions by a process of reasoning. On the contrary, men are controlled by imitation and only when they need to justify their positions do they begin to reason in self defense.

In art not only may the scope of imitation be seen, but the selective nature also of intelligent imitation is well brought out. It was claimed in discussing the nature of imitation that in its higher forms, where originality is most clearly manifested, the model tends to become an ideal. This may be more clearly seen in what we shall present here concerning art. It will also appear, I think, that the works of art are not due to some occult power from which they come out full grown as Venus from the waves, or as Athena from the head of Zeus. As in all other inventive powers and products of mind, they take their elements from sense data which become an idea, then an ideal, which is slowly and laboriously evolved from the first simple model; and the product or work of art is executed in intelligent imitation of the model or ideal.

¹The arts may be divided into the purely imitative or copying arts, as mechanical craft, wax figures, colored statues, artificial flowers, engravings, etc., and the fine or creative arts, poetry, music, painting, etc. The fine arts are all imitative; they are not copies, they are creations. They admit of the expression of an idea or sentiment, or telling of a story which distinguishes them from the merely imitative arts. De Quincey says that poetry takes precedence among the fine arts, that its mode of imitation is least material and farthest removed from sensible objects. It merely produces the images of objects by abstract and indirect means. It is not susceptible of being confounded with its model. Music comes next in order. Poetry and music each depend for their interpretation upon sentiment and mental activity. Painting, which imitates bodies by the lineal appearance and the color of bodies, is next in order of succession and is followed by sculpture, etc. In these last the model and what becomes the image are more nearly in actual contact. The fine arts, aside from literature, are peculiar in their power of expression. They consist in representing the moral by the physical, intellectual ideas and affections by palpable forms, in giving thought to bodies. The imitative arts copy the form; the fine arts make an ideal imitation. Ideal embellishment is beyond the province of mere copying. But this ideal has a physical basis. Man can not create something out of nothing or form without a model; that is the prerogative of the infinite alone. With all his powers man can not be anything but an imitator. A new idea or conception is suggested to the mind of man consciously or unconsciously, but it may always be traced to its origin. The artist must go to the immutable laws of nature to get the principles that are essential to successful imitation. Sir Joshua Reynolds says "our art is not a divine gift neither is it a mechanical trade." Goethe says "the artist must hold to

¹ M. A. Dwight, *Introduction to the Study of Art*, p. 11-33.

nature, imitate her. He must choose the best out of the good before him." Every one is familiar with the story giving the origin of the Corinthian order of architecture—the story of the artist who took his hint, his model, from the basket overgrown with leaves. He idealized the object presented to his notice, adapted it to a specific object and produced a work of artistic beauty that will be forever preserved. He held to the very essence of imitation in art, to represent reality by its appearance alone. A true work of imitation bears some impress from the mind of the artist, and thus the artist conveys to the mind of another his conception of the subject represented. His idea becomes an ideal and is expressed by imitating it. The great artist is distinguished not by uncommon powers of mind but by uncommon combination of powers—free imagination, fine sentiment both moral and intellectual, clear discrimination, sound reason and judgment. These powers in combination enable the artist to take a sense model, idealize it, and express it in imitation. His imitative and assimilative power enable him to separate the essential from the accidental, to proceed from part to whole, thus *educing* an ideal nature from the germs of the actual.

The Greeks have long been celebrated for their works of art. To what extent they got their models from other people is not known. Layard in his Assyrian researches has brought to light many specimens of artistic works which probably furnished models to the artists and architects of ancient Greece. Then, too, the Greeks possessed a remarkable ability for imitating nature. Aristotle well describes their conception of art in his definition: "A work of art is an idealized copy of human life—of character, emotion, action—under forms manifested to the sense." The perfection of art works among the Greeks consisted largely in their fixed ideals obtained from nature. ¹ Zeuxis painted grapes so perfectly true to nature

¹ Thomas Purdie, *Journal of the Society of Arts*, 12; 329.

that the birds came and pecked at the fruit on the canvas. Apelles painted horses so truthfully that animals of their own kind greeted them by neighing. Parrhasius painted a curtain so true to nature that his competitor took it for a real curtain drawn over the picture. It is claimed that the fine arts had their origin in the love of imitation which is no doubt an original, powerful sentiment or instinct of our minds. However, art is only great or imitation fascinating in proportion to intellectual elements employed. Goethe says the poet or painter holds up a mirror to material objects—earth, plants, animals, mankind—and catches a reflection of the world around him which is itself only a reflection of an ideal. Thus, fine art is a copy of a copy three times removed from truth.

While modern ideals differ essentially from Greek ideals, the importance of imitation—to choose the best and execute with patience and skill—is still recognized. William M. Hunt, one of America's great artists, used to urge his studio pupils to study the best pictures over and over again. "You must set yourselves ahead by studying fine things. I've told you over and over again whose works to draw—Michael Angelo, Raphael, Dürer, Holbein, Mantagna. Get hold of something of theirs. Hang it up in your room; trace it, copy it, draw it from memory over and over, until you own it as you own 'Casabianca' and 'Mary had a Little Lamb.'"

The great Italian artist ¹ Leonardo da Vinci happened in his boyhood to get in his possession that inestimable folio of drawings once owned by Vasari. This folio contained certain designs by Verrocchio, faces of such impressive beauty that Da Vinci copied them again and again. In the artist's works in later life, there seems to be a touch of the early pictures he copied so often as a germinal principle, "the unfathomable smile, always with a touch of something sinister in it." From childhood this model seems to have developed, defining itself

¹ Pater, *Studies in the History of the Renaissance*, pp. 116-117.

more and more clearly, until he met the Florentine lady, the wife of Francesco del Gioconde. She seemed to give living form to his ideal dream. Present, from the first incorporeal in the artist's thought, dimly traced in the designs of Verrocchio, his ideal took form in Mona Lisa, the portrait of the Florentine lady. This masterpiece of one of the great artists of the world reveals Da Vinci's mode of thought and work. It illustrates how an ideal model is developed in a master mind, its slow growth, and its final execution in imitation. It also illustrates how an ideal was attained, is adapted and used again and again, for the facial expression of Mona Lisa is traceable in his other, later portraits.

This use of a once perfected ideal is found in other artists. The face of little St. John in Botticelli's "Madonna of the Louvre" is used again and again in other works of that artist. Murillo got his models from the common people he met, and used the same ideal models over and over even in sacred subjects. Any one who will take the trouble to compare Cabanel's "Queen Vashti" and his "Shulamite" will not fail to observe the same ideal repeated in these paintings. The same thing may be observed in Vibert's "The Reprimand" and in his "The Startled Confessor." Most of Kensett's paintings and those of Inness have each a tone that will enable the observer to recognize the artist in his work. Or, take a group of portraits in the Metropolitan Museum and a common model may be traced through all. Compare Reynolds' portraits of "Lady Carew," "Mrs. Arnold," "Mrs. Angelo"; John Hoppner's portrait of a "Lady"; Richard Beechey's portrait of a "Lady"; Thomas Lawrence's "Lady Ellenborough"; Robert Pine's "Mrs. Reid"; Francis Cote's "Lady Hardwicke." These are all works of artists of originality. Yet the similarity is very striking. A similar model is seen in each. In Reynolds' "Lady Carew" and in his "Mrs. Angelo," it is most noticeable, except possibly in Hoppner's and in Beechey's portraits of ladies. The two last are very similar in tone, expression,

etc. These men form a kind of school in art. The fundamental principle in any school of art, or of literature is imitation. Among the master artists, it is selective, intelligent, often unconscious imitation. Among the second or third rate artists, imitation is the cause of the similarity but it is a less intelligent, a more mechanical kind of imitation; it approaches nearer to what we term copying.

Literature is quite as fruitful a field for the study of imitation as that more generally called art, which we have just been considering. The field is so large and rich in material that it would be too large a theme in itself for a paper like this. We shall therefore confine ourselves within small compass. We can not do more than suggest some of the productions of recognized literary merit and the intimate relations between imitation and originality. It must be borne in mind that the claim here made is that there is very little absolutely original. Originality is relative. Only one person in a million or in many millions can produce a work of originality, and such a person, may be, only once in a life time. What passed for original is only relatively so, and in this synthetic originality, imitation is a large factor.

To see more clearly the distinction between the absolutely original, such as only the genius may approach, and the relatively original, such as men of eminence may attain and ordinary people may approximate at least, let us ask the question—what is absolute originality? An absolutely original work must consist in something which can be likened to no other thing that existed previously. A work to be perfectly original should not merely remind us of no other work of the same class but prevent us from thinking of any other in connection with it. Such a work must possess characters, a turn of thought and of sentiment, and a style wholly its own. The materials in the management of which this originality is shown, must be drawn from nature alone and be referable to something in nature, and be interesting to the mind and heart of man.

If we try the great literary geniuses, such as Chaucer, Shakespeare, and Carlyle, by this standard, we shall find that each, to use James's phrase, exhibits but "a pepper corn" of originality, in the sense in which we are now using the term originality. Chaucer certainly borrowed largely from Boccaccio for his "Canterbury Tales." After the student has made a study of Shakespeare and finds how he laid the whole world under contribution, he will certainly feel that the great genius is not so great after all. Of his more than thirty-five plays, there is one plot that *seems* to be Shakespeare's. Carlyle's "Sartor Resartus" is of German origin, founded upon a book received from a German. No one disclaims the originality of these men, but we do claim that it consisted largely in their ability to imitate, to see the right model, to form new combinations using this model as a base for operation.

This use of imitation is seen in most great authors, especially in their most notable works. It has been said that ¹ Bulwer Lytton is an author of the composite kind, owing all he has attained less to the force of his own genius than to his valuable facility of imitating others. He took several of his characters in "The Caxtons" from Sterne's "Tristram Shandy." Sterne in his turn caught much of his humor from Rabelais and others. The essential things in "Robinson Crusoe" delighted men and boys five or six centuries before De Foe's time. The conception seems to have come from the Arabs—a child placed upon a lonely island and coming by degrees to a knowledge of every thing. "Gulliver's Travels" was suggested to Swift by the writings of a Frenchman, Cyrano de Bergerac. Cyrano wrote the history of the sun and moon as a satire on the philosophy of his age. He treated philosophy much as Cervantes had treated chivalry. A trip to the moon reveals many encounters and experiences much like those of Gulliver. But, Cyrano was not the original of Gulliver. This

¹ *Putnam's Monthly*, 8; 113.

may be found in Lucian's "True History." Rabelais imitated the Greeks, and in turn was imitated by those who came after him. Don Quixote is an old legend found in Lucian and in Aristophanes. Besides, earlier than Cervantes, Chaucer had expressed similar ideas. The Saxon Caedmon and later Avitus sang "Paradise Lost" long before Milton. Tennyson's "Two Voices" may have been suggested by George Fox.

Indeed, to any one who reads attentively, imitation would seem to be the law of literary progress and excellence. Imitation in literature as well as elsewhere has a great part, and we may as well make the best of the ability to imitate in a practical and philosophical way. Imitation can not be said to be a sign of weakness. The great Shakspeare and Burns are among those who have laid most determined hands upon the modes and thoughts of others. When a writer improves what he imitates, he does well; but when he fails to add beauty, we condemn him. New light, or grace, or charm, must be given. In the progress of the mind, in all departments of literature, we find imitation, the most palpable, in the books we most admire.

The scope of imitation is widest and doubtless most significant in society, in what goes to build up civilization. In the enlightening or civilizing process, there are two opposing and equally prominent forces at work. The one is the conservative force—to keep things as they are; the other a radical or progressive force—to keep things changing. Imitation is a factor in each. Society is held together more largely by imitation than by any other one agency. It brings the newly born members in line with the average behavior of their kind. This may be its most important function in society. Imitation is also progressive in its function in society. In any given social state, there are certain well recognized standards of conduct and behavior. For this given society, progress is possible only on the ground that there be in it some members, more vigorous, more active, more intelligent than the others.

These members—the skeptics, the socialists, it may be—break with the present order of things, with the accepted standards. Such persons forge ahead of their fellows and their generation. However, unless that leveling up force—intelligent imitation—comes to their aid, they will ever be regarded as cranks and fanatics. Since imitation is selective, chooses the best models, these more progressive members of society will be taken as models by the more thoughtful among the other members. This molding influence goes down through society in a geometric ratio. These intelligent, zealous, forceful men and women in society, who set the models for the others, are the leaven in society; the fermentation, the leavening of the social whole, is the work of imitation.

It is by means of imitation that the social web is woven. It comes to us as tradition. Through the imitative tendency and ability, we receive our social inheritance. ¹ M. Tarde points out that phenomena of every kind can be known only because they repeat themselves. In physics we study repetition under the forms of undulation of vibration; in biology, under the forms of heredity, or the transmission of life and characteristics from cell to cell; in sociology, under the form of imitation, or the transmission of impulse, feeling, and idea from individual to individual, from group to group, from generation to generation. For Mr. Tarde society is imitation through and through—one ceaseless round of imitation. For him, imitation is the fundamental characteristic of sociology. ² Prof. Giddings does not agree with this conclusion. He is of opinion that social consciousness is the fundamental fact of society. But he says if imitation is not fundamental in social relations it must be very nearly so. His reason for this view is that imitation is not peculiar to social relations; it is present in non-social affairs of life as well as in the social. ³ All

¹ *Les lois de l'imitation*.

² *Principles of Sociology*, p. 15.

³ *Principles of Sociology*, p. 100.

activity is a clash of atoms or of thoughts. Conflict is an essential of all progress. This conflict is manifested in one of two forms. First, there is primary conflict which is conquest. Second, there is secondary conflict which is contention. The first often destroys, the second simply modifies. All evolution begins in primary conflict and continues in the higher forms in contention. Death usually follows the first form; development, the second. When two armies contend, each repeats the manœuvres and many of the tactics of the other, as the war in South Africa at the present time well illustrates. When two men contend, each instinctly or selectively repeats the method of attack and defense of the other to a greater or less degree. This second kind of conflict is often seen in a milder form. The unexpected meeting of long parted friends has sometimes resulted in death. You meet a stranger, conflict may manifest itself in a flushing of the face, in a conscious thrill. In whatever form this conflict exhibits itself in one, it tends to repeat itself in the other. Imitation therefore is a part of every conflict. The mode of conflict instinctive or intelligent is followed by like kind of imitation.

Imitation is a factor in society, in the conflict that gradually assimilates and harmonizes the opposing forces. The characteristic modes of thought and action spread from individual to individual. However,¹ while imitation softens old conflicts it creates new ones. Imitation in religion, in politics, even in scientific thought, may set brother against brother. This is taught in prophecy and exemplified in the history of the Christian religion.

In society as everywhere else intelligent imitation is never a perfect copy. ² Like waves of light, it is refracted by its media. The nature of the mind of the imitator and the environment of the imitator, each tend towards differentiation. When the con-

¹ *Principles of Sociology*, p. 11.

² *Les lois de l'imitation*, p. 24.

flict produced by this differentiation results in a combination due to the contention of a weaker and stronger sentiment and image, we have the essence of ¹ invention. It is the creation of a new idea and a new ² practice by the combination of familiar ideas and of current practices. New examples and models are all the while coming into existence to struggle against the established customs and modes of imitation. It is in this way that both stability and progress owe much to this factor. Some of the essential elements of society—communication, toleration, alliance—are each largely contributed to by developed imitation. The chief social factor of the economic life is imitation. By means of it, sympathetic association is rendered more possible. By means of sympathetic imitation a social sense and a social habit are evolved. Likewise, the intellectual powers of voluntary attention, generalization, abstract thought, and invention are developed chiefly by association of individuals. ³ These presuppose in the individual the consciousness of himself, and that consciousness is an effect of his observation and imitation of individuals like himself.

The moral sentiments—self denial, self government—as well as the intellectual activities are largely developed through imitation. Adam Smith said: "As nature teaches the speculators to assume the circumstances of the persons principally concerned, so she teaches these last in some measure to assume those of the speculators." ⁴ We are so far susceptible to suggestion and so far imitative in all matters of material and moral well-being, that we desire and endeavor to live at least as well as the average, fairly well-to-do, fairly well-behaved members of the community. The desire to enjoy what others enjoy and the imitative tendency to act as others act, are strong enough in

¹ *Les lois de l'imitation*, p. 26.

² *Principles of Sociology*, p. 112.

³ *Principles of Sociology*, p. 122.

⁴ *Principles of Sociology*, p. 123.

the social individual to impel him to pursue his material and moral interests as diligently as most others pursue theirs. This combination of desire and diligence is the basis of what economists call the standard of living. It is the foundation of wealth and behavior as well as of all individual advancement.

It would be very interesting and instructive to know how large a part imitation plays in psychology, to know to what extent men follow the lead of Leibnitz, Locke, Kant, Wundt, and James in the method and thought of these leaders. How many men have imitated in their method of thought and research that of Darwin in reaching his conception of organic evolution? How many have imitated Schleiden and Schwann in the cell theory? For it is the method of thought and work that thinkers imitate most. Here imitation yields rich returns, because the method of thinking and of doing is the most valuable lesson we can learn from our fellows. When we compare how few men have hit upon a new method in physical, in chemical, or in biological laboratories, and how many men have imitated these few happy hits we can in part begin to appreciate the rôle of imitation in the sciences.

In history, religion, politics, art, literature, sociology, and in pure science, not only is the scope of imitation exhibited, but also its nature and significance further brought out. That imitation—an element playing so large part in all these lines of human progress—should be discredited for so long by so many people is certainly unfortunate to say the least. If it is as important a factor in the development of originality in these diverse fields of human thought and action as it seems to be, why should it not also be important in the process of school education?

III

THE SIGNIFICANCE OF IMITATION

Something of the significance of imitation has already appeared in the discussions of the previous topics. Before we consider any special phases of its significance, let us see what some of the prominent educators who have expressed themselves upon this subject have thought of the imitative process in education.

Aristotle says "Imitation is innate in men from childhood; for in this men differ from other animals that of all they are the most imitative and through imitation get their first teachings." In emphasizing the importance of teachers understanding their pupils, Quintilian seems to think that knowledge of the faculty of imitation and of the laws of memory are equally essential. If we remember what considerable importance he attached to memory, we may fairly well get his estimate of imitation. It would be one of the first educational means. Leibnitz made imitation an efficient factor in his world of monads. For him, the soul was a monad which reflected or imitated the other monads of the universe. By this means self-activity manifests itself. This was to him the soul's means of cognition. While Montaigne did not explicitly evaluate imitation, he made a telling application of its significance. His whole educational philosophy is an imitation of the education he received at the hands of his father.

However, it is only within the last ten or twelve years that educators have begun to see more clearly than the earlier educators the value of imitation and to express themselves more distinctly upon this subject. ¹Miss Haskell gives a clear

¹ *Pedagogical Seminary*, 3: 30.

description to show the motor function of imitation. She is of opinion that imitation is the mode in which all motor impulses discharge themselves. The energy of the child must pass from potentiality to actuality, and it does so most easily and efficiently by the path of imitation. ¹Prof. Royce says: "The imitative functions in their proper and almost inextricable entanglement with our individual and temperamental functions are absolutely essential elements of all our mental development, of all our worth as thinkers, as workers, as producers." ²Hazlitt is of the opinion that imitation gives pleasure to the learner by exciting curiosity and inviting a comparison between the object and the representation. It opens a new field for inquiry and leads the attention to a variety of details and distinctions not perceived before. It renders an object that is uninteresting in itself a source of pleasure, not by the repetition of the same idea but by suggesting new ideas, by detecting new properties and endless shades of differences. ³Stout brings out a similar value for attention. Imitation is a special development of attention. Attention is always striving after a more vivid, a more definite, a more complete apprehension of its object. Imitation is a way in which this endeavor may gratify itself. ⁴Smith considers imitation the means by which we come into sympathy with knowledge, sources of knowledge, and with our natural and social environment. In imitation there is an association of ideas or mental processes. It is a mode of perception or cognition. It is that form of perception in which the mind interprets what is given in sensation. Imitation of idea by ideas is sympathetic assimilation. We make the inner experience of another our own experience. The method of truth in his opinion is sympathetic imitation.

¹ *The Century Magazine*, 26; 107.

² *Round Table*, p. 11.

³ *Manual of Psychology*, II; 271.

⁴ *Methods of Knowledge*, p. 170.

Knowledge must consist in sympathetic imitation if it is a reproduction of what constitutes objects. ¹In imitation, however slavish it may appear, there is sometimes as it were a first soaring of the liberty of the child, of his aspiration after the ideal.

²Imitation marks the beginnings of education. The child who begins to imitate gives evidence of self consciousness. He notices the activity of another fellow being and recognizes that activity as proceeding from an energy or will power akin to the power which he himself possesses. He proves to himself the possession of that power by imitating the action in which he is interested. It is evident that imitation is a kind of spiritual assimilation, a digesting and making one's own of the acts of another. By means of imitation the child arrives at the fundamental principles which originated in action. Having found this in his own mind, he has his energy free and becomes original. ³Prof. James says "Man has always been recognized as the imitative animal par excellence . . . Each of us is, in fact, what he is, almost exclusively by virtue of his imitativeness. We become conscious of what we ourselves are by imitating others—the consciousness of what others are precedes—the sense of self grows by sense of pattern. The entire accumulated wealth of mankind—languages, arts, sciences—passes from one generation to another by social tradition, each generation simply imitating the last. Invention, using the term most broadly, and imitation are the two legs, so to call them, on which the human race historically has walked." ⁴Tracy says, "The child's attention is very easy to get and very hard to hold. This double fact renders him capable of education, but at the same time makes his education a gradual process which must consist largely in the

¹ Payne, *Compayre's Introduction on Teaching*, p. 221.

² Harris' Introduction to Taylor's *Child Study*, p. XI.

³ *Talks to Teachers*, p. 48.

⁴ *Psychology of Childhood*, p. 113.

formation of right habits in him through imitation." Guyau says "by the judicious use of the child's imitative suggestibility, we may make of him almost what we please." Again, ¹ Guyau says, "All perception is more or less reducible to an imitation, to the creation within us of a state corresponding to what we see in others."

¹ Holman gives it as his opinion that many of the most valuable things the human race has discovered have been stumbled upon, as it were, by some simple imitation. It is quite likely that the origin of fire may be explained in this way. So it happens that individuals soon learn that it is worth while to look out for helpful examples or causes and effects and to expend considerable energy in trying to imitate them. Thus, imitation prompts the will to action and guides it by practical experience and knowledge. Observation and the resulting imitation produce many of the highest aids to progress and are thus utilized in the practical affairs of life. Prof. Butler says, in his lecture course, in discussing imitation, that it is one of the strongest social bonds. Good influences and good examples have value only in so far as they are imitated. Culture and refinement can be taught by example alone; they can be learned only by imitation. Imitation makes up the major part of the child's life both in quality and in quantity, in his language, ideas and activity.

A reference to some work that has been done in the study of imitation will further illustrate its importance and prepare for a better understanding of our next topic.

Mr. E. H. Russel, of Worcester Normal, has published a volume which gives the records of children's imitations observed by the normal students. The volume gives more than 1200 examples of imitation of children from one to twelve years old. The subject matter of this book has been worked over and expressed in graphic form in six charts by Miss Car-

¹ *Education and Heredity*, p. 14.

² *Education*, p. 185.

oline Frear.¹ Her purpose was to discover the trends and age tendencies in the imitative activity of children. In some of the charts she distinguishes three kinds of imitation—direct, play or dramatic, and purposive imitation. I shall not reproduce the charts, but simply use per cents. to indicate the general position and directions of the lines on the charts. The ages of the children who were observed were one to twelve years. The per cents. here given show where the lines start the first year and where they end the twelfth year. However, they do not increase or decrease regularly as the per cents. seem to indicate. The first chart shows whom the child imitates the more at different ages—adults or other children: Adults, 82 per cent., 1st year; rises to 95 per cent. by 12th year. Children, 11 per cent., 1st year; falls to 0 per cent., almost, by 12th year.

The second chart shows that the child's imitations are: Direct, 70 per cent. 1st year; fall to 8 per cent. by the 12th year. Play, 20 per cent. 1st year; rises to 90 per cent. by 12th year.

The third chart shows the child imitates an: Idea, 45 per cent. 1st year; rises to 80 per cent. by 12th year. Actual thing, 55 per cent. 1st year; falls to 20 per cent by 12th year.

The fourth chart shows with whom the child plays: Alone, 35 per cent. 1st year; rises to 70 per cent. 2d year; falls to 10 per cent. by 12th year. Children, 9 per cent. 1st year; rises to 90 per cent. by 12th year. Adults, 55 per cent. 1st year; falls to 0 per cent. by 12th year.

The fifth chart shows what children imitate most and is based on play imitation: Action, 85 per cent. 1st year; falls to 55 per cent. by 4th year; rises to 94 per cent. by 8th year. Oral speech, 7 per cent. 1st year; rises to 26 per cent. by 4th year; falls to 23 per cent. by 8th year. Sound and action, 18 per cent. 1st year; rises to 24 per cent. 6th year; falls to 0 per cent. by 8th year.

¹ *Pedagogical Seminary*, Vol. 4, pp. 382-86.

The sixth chart is made out on a basis of direct imitation and shows that the child imitates: Action and speech, 53 per cent. 1st year; rises to 85 per cent.; falls to 80 per cent. by 12th year. Action alone, 45 per cent. 1st year; falls to 12 per cent. by 12th year.

The facts indicated by these charts are such as to commend them to careful consideration. I believe, on the whole, they will stand the test of reason and experience. The extent to which children imitate adults rather than other children, as shown in the first chart, is of practical value for teacher and parent. The second and third charts give results that are in evidence of the thought of this paper as to the nature and significance of imitation. It should be noted that in the first years of the child's life direct or perception imitation begins with 70 per cent. and decreases to 8 per cent. by the 12th year; that play imitation, which is a higher, less mechanical form, begins with 20 per cent. and rises to 90 per cent. in the same time. Imitation of an idea begins with 45 and rises to 80 per cent., while the more mechanical form, imitation of the actual thing, begins with 55 per cent. and falls to 20 per cent. The results in both these charts show that the faculty of intelligent imitation increases with the developing powers of mind. The progress is from tendency to imitate to ability to imitate, from a disposition to copy to power for originality.

It was shown by Miss Frear's first chart that children imitate adults about fifteen times as much as they imitate other children; and that chart gives the ratio only up to 12 years of age. At that age, the child practically ceases to imitate another child. It does not matter whether this is the actual ratio that exists or not. It doubtless is not. However, it does show the general tendency—that the child tends as it grows older to choose a more rational model, to select what it thinks is the best to imitate. This conclusion verifies and is verified by the experience of those who have either taught or observed children. Many teachers whom I have asked for

data on students imitating each other, say they could give a much larger number of examples of students imitating teachers. If this tendency to imitate adults more than their fellow students be kept in mind in considering the data below, we may get a more nearly correct perspective of the whole of student imitation.

To get a more reliable notion of student imitation of their fellows, I selected about sixty high-grade boarding schools. Most of these were preparatory schools, quite a number of them rank as colleges, a few are colleges. These schools were selected with the thought that imitation found among their students would tend to prove much more for the nature and scope of imitation than the same amount of information found in ordinary public schools. Of course, in the boarding school it can more readily be detected, because the teacher sees more of the student's life, besides the students come in contact more with each other. It must be remembered that the influence of the teacher would be increased for similar reasons, and the ratio of tendency to imitate adults and fellow students would not be seriously affected. These schools will furnish more favorable evidence for imitation than public schools made up of all classes. For it is fair to suppose the students in these schools will more than average in matters of intelligence and individuality with public school pupils. If imitation tended to decrease with increased intelligence and culture, one would find little or no imitation in these schools. So, it may be stated that the presence of imitation in so far as it was found in these schools, would lend evidence in favor of our main thesis: (1) that imitation is a characteristic of the more intellectual as well as of the less intellectual, (2) that it is of much wider scope than we are apt to concede.

The purpose of the questionnaires sent to these schools was "to find out whether there are certain characteristics whose possession makes a boy or girl likely to be imitated." Forty-five schools reported. Thirty of this number gave one or

more leaders of a larger or smaller group of students. Fifteen schools reported there was no such leader among their students. Just how many of these fifteen schools failed to interpret the questionnaire aright, I do not know. Some of them simply gave a negative answer to the first question. Others said there was no such leader of the whole school but that there were leaders of classes and small groups. Still a few seemed to take the term imitation in a menial sense. They indicated this by saying "Our students possess much personality. We take care that they have high ideals set before them. A boy would be considered contemptible here, who would imitate or ape another boy. We cultivate individuality," and similar statements. Some of the statements clearly indicate that the leader we were inquiring for was in some of these schools. Others indicate the leader may have been there. One principal, of much experience and close observation, in sending in the report of his school said: "I should be glad to know if any report no." This implies there is a leader or leaders in every school. I believe his inference is correct. Sometimes the leadership is on a very small scale. It may be the leader has but one person manifestly in tow. To say the least, the number of schools in which there are no leaders is much less than fifteen, the number reported.

Below the questionnaires are given with the answers tabulated after each question. A few reports did not seem to describe any individual leader, but simply gave what the person making the report considered characteristics of leaders. These answers are not given. A few answers given in some of the reports could not be expressed in these definite terms. Such are not included in the tabulation.

QUESTIONNAIRE I

1. Is there now in your school any boy who is naturally imitated by other boys, or who may be called a leader among the boys?

Yes, 14 schools.

No, 8 schools. Total reported, 22. 16 boys described.

If your answer is no, please be sure to mark it No and return the same to us, as it is very important to know the number of schools where there is no imitation.

If your answer is yes, we shall be very much pleased if you will answer the remaining questions, or as many of them as you can.

2. How old is he ?

Average age 16 years +.

3. Are the boys who imitate him larger or smaller, as a rule, than he ?

Larger, 1.

Smaller, 3.

About same, 11.

4. Are they older or younger than he ?

Older, 1.

Younger, 6.

About same, 9.

7. Is he on the base ball team ?

Yes, 7.

No, 5.

8. Is he on the foot ball team ?

Yes, 10.

No, 4.

9. Is he on any other athletic team ?

Yes, 8.

No, 6.

10. Is he of strong emotional temperament, or is he of deliberate, intellectual temperament ?

Emotional, 6.

Intellectual, 2.

Deliberate, 5.

Nervous, 2.

11. Is he notable for boldness or daring?

Yes, 8.

No, 4.

Fearless, 2.

Courageous, 2.

15. Has he any noticeable peculiarities, as stammering, lameness, crosseyedness, etc.?

Yes, 0.

No, 16.

The replies to other questions showed no marked difference between the boy imitated and his fellows in point of wealth, social position, fluency of speech, rank in class, mental ability, or moral strength.

QUESTIONNAIRE II

1. Is there now in your school any girl who is naturally imitated by the other girls, or who may be termed a leader among the girls?

Yes, 16 schools.

No, 7 schools. Total reported, 23. 14 girls described.

If your answer is no, please be sure to mark it No and return the same to us, as it is very important to know the number of schools where there is no imitation.

If your answer is yes, we shall be very much pleased, if you will answer the remaining questions, or as many of them as you can.

2. How old is she?

2—13 years.

4—16 years.

2—17 years.

5—18 years.

1—20 years.

Average age, 17 years.

3. Are the girls who imitate her larger or smaller, as a rule, than she?

Larger, 1.

Smaller, 4.

Both, 4.

Same, 4.

4. Are they older or younger than she?

Older, 0.

Younger, 5.

Both, 7.

About same, 2.

5. Does she spend more money or less than those who imitate her?

More, 3.

Less, 3.

Pretends more, 1.

About same, 6.

6. Has her family wealth, position or power more or less than the families of those girls who imitate her?

Yes, 3.

No, 6.

Pretends more, 1.

7. Is she distinguished in any athletic games or exercises?

Yes, 1.

No, 6.

Fond of, 4.

Luxurious and idle, 1.

8. Is she of strong emotional temperament. or of deliberate intellectual temperament?

Emotional, 9.

Deliberate, 2.

Intellectual, 3.

9. Is she of marked timidity or of manifest strong desires?

Assumes timidity, 2.

Strong desires, 12.

10. Is she notable for fluency of speech in conversation ?
 - Yes, 8.
 - No, 2.
 - Talks well, 2.
 - Enjoys shocking hearers, 1.
11. What approximately is her rank in class ?
 - High, 3.
 - Good, 2.
 - Av., 6.
 - Low, very, 2.
12. In general, would you call her brighter, abler than those who imitate her ?
 - Yes, 5.
 - No, 9.
 - Of the 9, but confident, 1.
 - but clever, 1.
 - but assertive, 2.
13. Has she any noticeable peculiarities, as stammering, lameness, crosseyedness, etc. ?
 - Yes, 0.
 - No, 14.
14. Is she strong or weak morally ?
 - Strong, 2.
 - Av., 4.
 - Weak, 3.
 - High ideals, 1.
 - Strong in her own faith, 1.
15. Does she dress in a showy or gaudy manner ?
 - Gaudy, 2.
 - Showy, 3.
 - Well, 2.
 - Good taste, 4.
 - Quiet in dress, 1.

16. Does she sing well?
 Yes, 6.
 Comic songs, 2.
 No, 4.
17. Does she play on any instrument well?
 Yes, 2.
 No, 9.
18. Has she marked dramatic talent?
 Yes, 3.
 Good mimic, 1.
 No, 7.
19. Is she distinguished for beauty of form, features, carriage, voice?
 Yes, 6. Beautiful features, 1.
 No, 2. Beautiful carriage, 1.
 Beautiful form, 2.
 Fascinating manners, 2.

These answers found in the questionnaires indicate something of the nature of imitation, as was pointed out above. In the preparation of the questions, it was necessary to limit them to such acts as could be seen in the students. The internal, higher forms of imitation are not easily detected. This latter kind of imitation is manifested in much in the same way, and becomes evident in degree as growth of intellect and character show themselves. It is of slow growth, not easily observed, nor is its progress readily estimated in a given time. Recognizing these limitations of the questionnaire, we may still see in the answers given a tendency to imitate ideas rather than perceptions. The wide scope of imitation among students is very apparent. It must be remembered these were not the only leaders in these schools, nor was the imitation confined to that of leaders. This fact was pointed out in many of the reports received. Such statements as these in the reports indicate this: "Almost every class or group of students has its leader; it is difficult to choose the student most imitated."

The questionnaires bring out some of the characteristics of the leader more clearly than they indicate either the nature or the scope of imitation. The question why some people are leaders has long been one of much prominence and interest. It may be said in general terms that strong belief and enthusiasm bring followers, that the leader has vigor of both mind and body, that he has often an over-mastering will expressed in strong desires. It may be seen in the questionnaires that most of the imitators of the leaders were younger than the leader or of about the same age as the leader. One interesting case is given where one boy is notably the leader of one other boy, who is both larger and older. The report says, "The leadership seems to be due simply to the superior energy and dash of the leader. The boy who follows is in all respects the superior—older, larger, more refined, having more money, a better student, and finer looking." In general, however, size and age may cause a boy or girl to be imitated, and boys may even be dominated by one older than themselves. It is a very serious matter for a boy to be placed in close relation with an older, coarser, or less refined person.

Wealth and position do not seem to be elements of leadership. The fact that a large majority of the leaders among boys are very active in athletics is significant. This is not true of the girls. And the difference between boys and girls is seen in temperament. The boy leaders are more deliberate; the girls, emotional, strong in desires, fluent in speech. The girls seem to choose their leaders more from outward appearances, as seen in dress, beauty, etc. The boys choose their leaders more for some inner characteristic, such as boldness, courage, energy. Ability and rank in school do not seem to be essentials for either boys or girls as leaders. It also seems that the leader must have no noticeable physical peculiarities. It is interesting to note the moral characteristics of the leaders. I do not know just how much the answers here do show. It is evident on the face of the reports that "morally strong" was

used in more than one sense by those who made out the reports. Some took morally strong as synonymous with morally good or bad ; others, morally strong to mean morally good. Yet the reports clearly show that the leader may not only be morally weak, but in very many cases the leader is specifically characterized as morally bad. This phase of leadership would be one of the most interesting and profitable studies for further investigation by parents and by teachers. Imitation is such an all-powerful factor in the realm of morality that it is well worth while to find more positive evidence in this matter. For example, it was stated in some of the questionnaires answered that the students who possess less will-power tend to choose morally bad leaders rather than morally good leaders to imitate. Whether these statements were true or not, further study of this subject is needed ; for not only the individual life, but the community and social national life as well, in moral ideas, are so largely determined by leaders in business, in politics, in state, in war. Can we estimate the influence of morally bad students or teachers ? Much less can we estimate how many persons are infected by a morally bad political leader, state official, representative or senator in Congress. Any one who desires may, in a small way, get some idea of the influence of morally bad men in high places. To get some notion of this influence, one needs only to approach less prominent men than those cited, whose conduct may be called questionable. The matter of such conduct is no sooner raised than these less prominent men will refer you to a long list of more prominent, or equally prominent men, who deported themselves in a similar manner. This matter, however — imitation and morality — will be considered somewhat more in detail in a later section of this paper. The following section will continue the study of imitation by the questionnaire method in the training of teachers.

The training of teachers affords a fruitful field for the study and application of imitation in education. It will be my pur-

pose here to show that imitation properly understood and applied may contribute much to the solution of practical problems in the training of teachers. Among these problems there is the difficulty of securing natural conditions and ample opportunity for pupil teaching, and the unwillingness of a sufficiently large number of persons to go through so long apprenticeship in the training schools. And, in consequence of this unwillingness, very few teachers have any training at all. Then there is the economic problem. The term economic is used here in a liberal sense. It refers in part to the cost in terms of money, but it has reference especially to the cost in terms of time and energy. The waste in time and energy in the training of teachers is no small amount, as I shall try to show.

The questions then to be considered are: How will imitation aid in the solution of the practical problems? Where is this waste in training of teachers? How will imitation effect a conservation of time and energy? To get the whole question before us and to indicate what imitation of an intelligent kind may contribute in answer to these questions, I shall submit the results of two questionnaires. These questionnaires were placed in the hands of only such teachers as were in positions to give reliable data. The answers came from many different states and represent more than forty different schools and school systems. Form III, given below, was answered by 24 grade teachers, 36 normal teachers, and 14 high school and college teachers. So far as the answers could be definitely and accurately tabulated, they are given after each question. A few teachers did not answer all the questions and some answers given could not be classified.

QUESTIONNAIRE III

1. Please indicate what courses you have taken as a student.

	Grade Teachers.	Normal Teachers.	H. & College Teachers.	Total.
<i>a.</i> In High School or its equivalent	19	32	14	65
<i>b.</i> In Normal School, .	17	28	5	50
<i>c.</i> In Training Class, .	16	7	2	25
<i>d.</i> How many years have you taught? . . .	12 Av.	12 Av.	10 Av.	

2. Please classify your past teachers as accurately as you can according to the following points, giving under each point the number of men and of women, kind of school as grades, high school, normal school, etc., in which such teachers instructed you:

	No. of Women.	No. of Men.	Kind of school.			
			Grades.	Normal School.	High School.	College.
<i>a.</i> Favorite teachers, 151	178	22	55	27	30	
<i>b.</i> Good teachers, . 235	246	51	49	15	68	
<i>c.</i> Indifferent teach- ers, 172	138	45	26	34	39	
<i>d.</i> Poor teachers, . 105	87	26	22	9	31	

3. Did you have any favorite teachers whom you did not consider skillful in methods of instruction?

Yes, 36.

No, 32.

In government?

Yes, 33.

No, 32.

In either instruction or government?

Yes, 14.

No, 26.

4. What characteristics made them favorites of yours?

Most of the answers were expressed in these terms—"kindness," "interest," "sympathy," "enthusiasm," "justice," "cordiality," "sociability," "good manners," etc.

5. Do you hold in mind any teachers as models in method of instruction and of government whom you more or less consciously strive to emulate?

Yes, 66.

No, 3.

If so, give such as follows:

No. of teachers.	No of models found in the
a. Women, 73.	Kind of School {
b. Men, 124.	
	Grades, 30.
	Normal 53.
	High School, 25.
	College, 52.

c. Add any whom you hold in mind as models in some one subject or in government alone as follows:

No. of teachers.	Subject	Govern-ment.	Kind of school	No. of models found in
a. Women,	59	37	school {	Grades, 30.
b. Men.	87	65		Normal, 50,
				High School, 18.
				College, 48.

6. Did those teachers whom you hold as models differ from your other teachers in academic or professional acquirements?

Yes, 29.

No, 18.

7. Did they require more or less response from you as a student than other teachers?

More, 45.

Less, 16.

8. Were they more or less exacting in their requirements of you than the other teachers?

a. In the assigned work.

More, 44.

About same or less, 12.

b. In conduct or deportment.

More, 36.

About same or less, 15.

9. In the following list check all those things you are aware of imitating in your past teachers; use figures—1, 2, 3—to indicate something of the relative degree :

	No. Ans.	No. Points.		No. Ans.	No. Points.
<i>a.</i> Assigning lessons	33	62	<i>j.</i> Calm demeanor	37	78
<i>b.</i> Reviewing work	33	68	<i>k.</i> Emotional de-		
<i>c.</i> Questioning pupils	48	109	meanor . . .	11	22
<i>d.</i> Work at black-board	37	75	<i>l.</i> Petulancy . . .	6	10
<i>e.</i> Using apparatus .	11	15	<i>n.</i> Sarcasm . . .	18	38
<i>f.</i> Beginning a subject	29	58	<i>o.</i> Scolding . . .	12	18
<i>g.</i> Movements about room	22	44	Commending . .	33	65
<i>h.</i> Gestures	8	9	<i>p.</i> Manifested sympathy	30	56
<i>i.</i> Facial expression	11	15	<i>q.</i> Placing emphasis on given points of subject matter	40	91

10. In teaching the different subjects, as spelling, reading, history, etc., do you find you tend to imitate more in some than in others? If so, name the, say five, subjects of most marked imitation in a decreasing series.

Answers varied too much to admit of any statement in brief form.

11. Have you had any teachers considered good by you, whom you do not imitate?

Yes, 46.

No, 14.

12. Representing all your imitative tendency by 100, mark

the per cent. of your imitation of the following types of teachers, so that the sum of per cents. will equal 100:

- a.* Teachers of intellectual temperament, 64 Ans. Av. 38 per cent.
- b.* Teachers of emotional temperament, 64 Ans. Av. 19 per cent.
- c.* Teachers of strong will, 64 Ans. Av. 43 per cent.

13. As in question 12, mark the amounts of your tendencies to imitate:

- a.* Your past teachers, 65 Ans. 49 per cent. Av.
- b.* Model or other school work seen, 65 Ans. 51 per cent. Av.

(13) Classified:	Grade Teachers.	Normal Teachers.	High & College Teachers.
	21 Ans.	32 Ans.	12 Ans.
<i>a.</i> 40 per cent.		63 per cent.	46 per cent.
<i>b.</i> 60 per cent.		37 per cent.	54 per cent.

14. Again, as in question 12, mark, as accurately as you can, the percentage of your professional acquirements from the following sources:

	An estimate of 41 teachers who had no practice school work.	Answers of 25 teachers who had training class work as pupil teachers.
<i>a.</i> Imitation of past teachers	25 per cent.	21 per cent.
<i>b.</i> Imitation of school work seen, 22 "	"	23 "
<i>c.</i> Theory and practice of education studies	20 "	20 "
<i>d.</i> Practice school or class work done	33 "	36 "

A few suggestions here may assist in getting the import of the questions and the significance of the answers. The purpose of question (2) was to find about what ratio the number of teachers in (*c*) and (*d*) bears to the number in (*a*) and (*b*), and to find in what kind of schools these good or poor teachers are most abundant. It will be found that this ratio is $\frac{5}{8}$

nearly; or the ratio of indifferent and poor teachers to the whole number of teachers is $\frac{3}{8}$ nearly. This means inefficient teachers about 2 days per week during the school life of the pupils, or about 4 months in the year. The classification of teachers according to schools is not complete. Many answers could not be tabulated. Only those are given about which I could be sure. However, I do not think this affects the conclusions that may be drawn. If we compare the kinds of schools, we find the schools rank in efficiency in this order: normal first, college second, grades third, high schools fourth. The normal ranks high above any other; the grades and high school rank very low, with little difference in favor of the former.

The fifth question is probably the most valuable one in the list and the answers are most significant. It contributes the most reliable data for our subject. It gives actual facts and, it must be noted, it presents but the minimum. All unconscious imitation and all those undesirable models, of which we found so many in question (2) and which we find ourselves imitating in spite of our efforts not to do so, must be added to get the sum total. It is very difficult to get a just notion of the bad models imitated. In question (g), (h), (l), (m), and (n) were introduced for this purpose. Most teachers would not care to put themselves on record in this matter. There were not many teachers to whom I could explain that an answer to one of these meant simply that they found themselves doing such things in imitation in spite of their desire not to imitate. Since most answers that I received to these four points came from the teachers to whom this explanation was made, I am led to believe that the actual facts would give a much larger number of answers and counts to these points, if the explanation had been given to all the teachers. In this question (g), the figures in the first columns represent the number of teachers who checked the respective points as imitated by themselves; the figures in the second columns give the sums of the counts—1,

2, 3—as the points were checked. These points were asked for not so much for the value of the subject matter obtained as to get some real data to show that imitation does exist on a large scale. However, these answers do indicate much besides this. They show that intellectual and moral characteristics of teachers are imitated as well as the more mechanical, that any phase of the teacher's acquired outfit may come through imitation.

The answers to question (11) are of value. However, the value rests upon supposition. This hypothesis, that every good teacher will be imitated, is supported by abundant evidence throughout this paper. There is much evidence to show that a good model is always imitated and a bad model often imitated. If we take this view, the answers in this question indicate that the unconscious imitation, that should be added to the conscious imitation in question (5), is a large factor. And if to the unconscious imitation of good models, the conscious and unconscious imitation of bad models be added, we have a just estimate of the entire influence of imitation in the training of teachers.

In questions (13) and (14), we have the four points to be considered in the training of teachers. In question (13), the answers of 65 teachers are given with the average per cent. for each point. The answers are also given according to the kind of teachers giving them. I am of opinion the results are fairly accurate, that normal teachers do imitate their former teachers more than either grade or high school and college teachers imitate theirs. Many high school and college teachers said in their answers that much of their imitation was of their associates. The grade teachers have a much better opportunity, in many cases more need, to imitate work seen than normal teachers. In question (14) the purpose was to get the four points evaluated by several groups of competent teachers, that results might be compared. In the first column, the answers of 41 teachers are given in average per cents. These teachers

had no practice school training. Their answers are based in (d) upon what they have gained by experience in school work while teaching. The validity of these answers may be questioned. This would be especially true if they stood alone, but taken with three other groups they lend much to the weight of evidence. It should be borne in mind that none of the evidence in this paper, or all taken together, is thought to be sufficient to demonstrate anything. The kind of truth we are here seeking cannot be demonstrated in the strict sense of the term. This paper deals with probable and not with demonstrable evidence; and its purpose is to try to show where the weight of evidence lies in the influence of imitation in education. In this sense, and taken with the other data given, these answers have value.

In the second column are the answers of 25 teachers who have had practice school training. The evidence given in this column is for this same reason more reliable than that in the first column. It should be noticed that the average per cents do not vary much in the two columns, and where there is a difference, it is found just where reason would look for it. This fact lends weight to the whole evidence. These four points will be found in the next questionnaire, so any further consideration of them may be deferred until we have seen the results in form IV.

The purpose of Questionnaire IV. was to get evidence on the influence and value of imitation in the training of teachers from those who have had much experience in training schools. The answers here represent 24 training schools, and were given by 66 critic and model school teachers, and by 22 heads of departments, such as professors of education, principals of normal schools, and principals of training and model schools. Answers from professors of education and from principals of normal schools are included in the 22 heads of departments only where such professors and principals have under their direction a model or training school. The answers in this

form are tabulated after each question as in the other forms. Most of them may be easily interpreted.

QUESTIONNAIRE IV.

Model School and Critic Teachers.

1. Do your pupil teachers tend to imitate the teachers who give them their academic instruction, while doing your work in the training school?

Yes, 43.

No, 00.

Very little, 12.

2. If you give model lessons, do they tend to imitate you?

Yes, 54.

No, 00.

Very little, 12.

3. Check *all* of those things which you have noticed your pupils imitating.

<i>a.</i> Mannerisms	33	<i>k.</i> Austerity	22
<i>b.</i> Distribution of material .	51	<i>l.</i> Slang	8
<i>c.</i> Use of devices	57	<i>m.</i> Gesture	20
<i>d.</i> Use of illustrative material	50	<i>n.</i> Gentleness	24
<i>e.</i> Dealing with disorder . .	50	<i>o.</i> Polish	13
<i>f.</i> General plan of lessons .	47	<i>p.</i> Facial expression . . .	4
<i>g.</i> Correction of pupils' work.	25	<i>q.</i> Add any others you may have noticed.	
<i>h.</i> Artificial dignity	16	Moderation	1
<i>i.</i> Naturalness	20	Academic method . . .	1
<i>j.</i> Tone of voice	30		

4. Do pupils who imitate more or less acquire good methods of instruction and of government more or less rapidly and easily than those who do not imitate?

More, 46.

Less, 5.

Depends on pupils, 6.

5. In estimating a pupil teacher, do you regard favorably or unfavorably his power of imitating?

Favorably, 52.

Unfavorably, 5.

If not too far, 6.

6. Using 1, 2, 3 and 4—4 representing highest degree—mark the following points to indicate the sources of acquired skill as you see it in your pupil teachers.

- | | |
|--|--|
| a. Imitation of former teachers. 17 % | } These represent the average per cents. of 44 answers by critic and model teachers. |
| b. Imitation of model or other school work seen . . . 27 % | |
| c. Theory and practice studied. 22 % | |
| d. Practice school work done . 34 % | |

These same four points answered by 16 heads of departments representing 12 different institutions.	} a. 28 % b. 23 % c. 19 % d. 30 %

7. Have you noted any difference between pupils coming to you from relatively poor schools and teachers, and pupils coming from relatively good schools and teachers, in the facility with which they acquire skill in teaching?

Yes, 50.

No, 2.

8. If there is any difference, to what would you attribute such?

The answers were in such terms as "better teachers,"
"better training,"
"better models."

9. There is practice teaching under supervision followed by criticism of work; then, there is class-work done by a skilled teacher and seen by pupils under supervision of critic teacher, the lesson being discussed later in the class conducted by the critic teacher. In training teachers which of these two methods, calling them such, should receive more emphasis and time?

First, . . . 45.	{	These are answers of critic and model teachers.
Second, . . . 8.		
First, . . . 9.	{	These are answers of heads of departments.
Second, . . . 8.		

10. If pupils who are to become teachers received their entire academic education under none but the most skillful teachers, do you think there would be any gain in time and energy in their professional training?

Yes, 64.

No, 00.

The columns of figures in question (3) give the number of teachers who have observed their pupil teachers imitate in one or more of these ways. What was said of the purpose of question (9) in form III, and the value of the answers there given applies to this question and to these answers.

In questions (4) and (5), we have the most reliable and significant data given in this form. The answers are decidedly in favor of a proper use of imitation in the training of teachers. They indicate much as to the nature and the possibility of imitation. The experience and observation of those who answered these questions in the affirmative go to prove that imitation does bring out and develop originality, that good models imitated make development of individuality and personality surer and more rapid in the training of teachers. And it should be noted here, that if this principle holds good in training teachers, it probably is equally valid in every other phase of education.

The two remaining questions to which I desire especially to call attention are (6) and (9). Question (6) is the same one we had in form III. Here it is answered by 44 model school and critic teachers and by 16 heads of departments. The following tables repeat the answers of the 126 teachers to this question by groups for more convenient study and comparison :

	1	2	3	4
<i>a.</i> Imitation of former teachers, .	25%	21%	17%	28%
<i>b.</i> Imitation of model and other school work seen,	22%	23%	27%	23%
<i>c.</i> Theory and practice studied, .	20%	20%	22%	19%
<i>d.</i> Practice school work done, .	30%	36%	34%	30%
Total imitation by (<i>a</i>) and (<i>b</i>),	47%	44%	44%	51%
Total acquirements by (<i>c</i>) and (<i>d</i>)	53%	56%	56%	49%

Column (1) gives answers of 41 teachers who had no practice training.

Column (2) gives answers of 25 teachers who had practice training.

Column (3) gives answers of 44 critic and model teachers.

Column (4) gives answers of 16 heads of departments.

The answers, or average per cents., in these tables here repeated do not vary more than would be expected. The per cent. of (*b*) in column (3) is high, but if we remember that model teachers place much emphasis upon model school work seen, the per cents would seem to represent the facts. It is significant that these estimates coming from four different groups of teachers, and from as many different standpoints, so nearly agree. It certainly adds much to the validity of the evidence and indicates that the true value of these four points in the training of teachers is somewhat approximately given. The truth as to the value of imitation is not far from these results. It will be seen that approximately $\frac{5}{11}$ of the teacher's acquired fitness for teaching comes through imitation, that about $\frac{6}{11}$ comes through the means now generally employed in the training of teachers. It has already been pointed out that unconscious imitation is a large factor in every activity of life. This large factor is not included in these results. However, the results as here given are sufficient for our present purpose.

Question (9) meant to recognize two factors in training

teachers—practice-work and criticism, and observation of model work and criticism. The aim was to find where the emphasis—the greater amount of time and energy—should be placed in a wise system of training. It will be seen that a large majority of those who answered this question prefer to place the emphasis upon practice work and criticism. This is true of the model and critic teachers. Of the 16 heads of departments, 9 are more favorable to placing the emphasis on practice work and criticism, and 8 favor the observation and criticism. It would seem the first method has the weight of evidence in its favor. This is in keeping with the other data given in the questionnaire. At most, these data represent but the minimum of imitation, and their value consists largely in this fact. There are at least two valid reasons for saying that not more than the minimum value is given. First, teachers cannot report their unconscious imitation, and it must be evident that this factor is large. Secondly, an imitator is in such disrepute that no teacher would be disposed to give more than his minimum imitation, that is, the part of which he is pretty fully aware. As it will later appear, I wish to question whether the first method—that of practice teaching followed by criticism—should receive the more emphasis, whether it is more expedient than the second in the training of teachers.

We may now return to the statement made in the first part of this section, that there is probably much loss of time and energy in the training of teachers. There is sufficient evidence in these two last questionnaires to render this more than probable. We found that about $\frac{2}{3}$ of the school life of those who are preparing to teach is spent under the tuition of indifferent and poor teachers. If we put the average school life of those preparing to teach at 12 years, which is a low estimate, approximately five years of this time is spent under very unfavorable conditions to say the least. Under such circumstances, the waste of time and energy in the acquisition of knowledge is great. This is the only waste that is usually

recognized. Yet, I do not believe it is the largest item in the loss column for even the purely academic student. ¹ In the replies of 55 college presidents and representative men to the question: What is the best thing college does for a man? influence of personality everywhere dominates. How does personality count for so much? Why does it count for so much? The mere knowledge of the personality of another individual does not differ from any other knowledge; it has no more value for the student than other knowledge. Personality is valuable only in so far as the student partakes of, becomes like, that personality. But, how get it, catch it, come by it? There is but one way, and that is the simple, natural, easy way of imitation. The student imitates the interest, zeal, temperament, methods of thought and work, and he thus gets the essentials of that personality. Whatever of worth there may be in any personality may be acquired, so far as such an acquisition may be made, by imitation alone. Then for the future teacher, $\frac{3}{4}$ of his teachers not only fail to furnish this desirable characteristic but they do furnish what is not desirable—a bad model that will also be imitated. Since the pupil under tuition is to do the same kind of work that he now sees so badly done, the amount of waste is multiplied many times. Progress is not only retarded, but these very things will have to be unlearned. To unlearn a thing is even slower and more difficult than to learn that thing aright. Some of those who filled out blanks giving data on this subject made at least two strong points that are applicable here. On the one hand, it was pointed out that it is more difficult to convince a person who has absorbed bad models that the way he learned is not the right way, than it is to teach him the right way. On the other hand, it was pointed out that many persons, after they are convinced of error and learn better methods of teaching, soon relapse into the old unpedagogical way of doing things.

¹ Phillips, in *Pedagogical Seminary* 6, 242.

Training-teachers say that many of their pupils who come from poor schools will soon relapse from what they learned in training and return to their old idols, I have seen some of the difficulties of "convincing and unlearning," and I have known normal students to "relapse" when they leave the normal school to teach.

The occasion for all this waste is the absorbing of bad models while pupils, from which the future teachers are not able to free themselves. There is still another source of waste in the training of teachers, or at least I am fully persuaded of such fact. This was referred to in discussing question (9) in form IV. The tendency is now too prevalent to try to furnish too much by means of the training school, and to assign too little value to the imitation and criticism of good models seen. Training work may do one of two things. First, teachers may be so thoroughly drilled in the training school that the use of good methods in teaching has become a habit. Such drilling is unwise and a waste of time and energy. It is unwise, because those who will become efficient teachers do not need so long training. There is a more expedient course to pursue, as we shall presently try to show. For those who will acquire and practice what the training school furnishes, only when such training has become habitual, it is also a waste in education. Such teachers must always be mechanical plodders. Their work in the school-room will never be commensurate with the cost of their training. Whatever of efficiency there is in such teachers may be secured more economically.

The second thing that training may do for teachers is to enable them to see and appreciate the fundamental problems in teaching. This is as much as any training-school can afford to do. To attempt more than this is a waste to all concerned. It is a loss to those upon whom the practice is made, because we have already seen that the best thing a college can furnish—and the same thing is true of any other

school—is the personality of the teacher. Pupil teachers can not exert the influence of a wholesome personality even when they possess it. The conditions cannot be made sufficiently natural. There is too much restraint. Personality must have perfect freedom if it is to come out as a good model for those who are taught.

The questions: "What is the remedy? How may some of this waste be obviated?" may now be answered. Better teachers would solve the whole problem. If pupils never saw any but good teaching, few, excepting the very indolent and stupid, would fall into bad methods. While it is not possible to have all good teachers, much could be gained if the evil effect of bad models was more vigorously insisted upon, if those who are thinking of becoming teachers were fully awakened to this fact. At least, much could be done in normal schools. Although the normal schools seem to rank first in good models, there is still too large a number of indifferent and poor teachers in these schools. Another more practical remedy for the long apprenticeship in training-schools is more observation of good model work, under wise supervision and followed by expert criticism and discussion. This is the more economical way of training teachers. One model class will serve a whole class of pupil teachers for a given lesson. All that is needed in the way of pupil teaching is enough to test their observation and criticism, to bring out the practical difficulties and suggest the remedies. The chief value of pupil teaching is not to give the pupil an opportunity to flounder about until he hits upon a good method, and yet this is the logical conclusion of long training-school courses. The real value of pupil teaching is to bring out clearly and enforce deeply what should be imitated—the good models. It is to enable the pupil to recognize and choose the good models. All this may be secured with less training work, if we once come to recognize the value and significance of imitation, and if we wisely employ observation of good model-school work

and follow this observation with skillfully conducted criticism and discussion.

There is still another substitute for much training-school work. This consists in good supervision of teachers after they have entered upon their work as teachers. The need of supervision is generally recognized, but the difference between good supervision and poor supervision, or none at all, is seldom noted. The most effective and economical training of teachers possible is to be had in actual school work under wise and efficient supervision. This training of regular teachers may be greatly facilitated if boards of education and superintendents would have those teachers most in need of training see good teaching done. This observation should be followed by the same kind of criticism as suggested above in the observation of model-school teaching. If superintendents and principals were properly qualified for their work, there is no phase of training-school work that might not be just as effectively done in any school whatsoever as in a training school; and it might be done much more economically if the full influence and value of imitation were recognized and utilized. Those teachers who will become efficient would have greater freedom, and so become more efficient with less expenditure of time and energy; and those who would never become highly efficient teachers could have their dull ability brought out by the use of more observation and criticism and less practice-teaching; and in each case, good supervision would take up and continue the work of the training school.

The waste in the training of teachers may be compared with the waste, pretty fully recognized, in general education. The best educational thinkers are of opinion that there is much waste in school work, because what is taught in school is not well articulated with actual life experience, because the central purpose and the aim of education are not manifested in the whole process. The loss of time and energy in the training of teachers is due to this same cause. The prospective teacher

is brought up through a vicious system of schools and bad models. He becomes thoroughly saturated with bad methods; then he is sent to a normal school where there are still many bad models, and he is asked to put away the bone and sinew of much of his former training, and to put on new muscle and fiber. And, this new body of thought and action must be built up *out of nothing*. He must not *feed on and imitate* good models, but he must be eminently original, he must work out his own individuality, which consists, so far as content is concerned, in bad blood absorbed from bad models. When he goes out to teach, he is placed under superintendents and principals who are not models; neither can they set a model, nor do they allow their teachers sufficient opportunity to see good teaching done. In this way, the training of teachers is not correlated with all that contributes to make good teachers, chiefly because the significance of imitation is not recognized and utilized.

The value of imitation in teaching morality has already been referred to in discussing the answers to Questionnaires I and II. Let us now try to find what significance imitation has in moral education. An essential aim of education is to develop moral beings, to develop good character. There are many other desirable ends to be attained by education, but unless these are accompanied by good character education is incomplete. Any means of furthering or of achieving the purposes of education must lend itself to the inculcation of morality, if such means is to receive wide application and general recognition and favor. So, it is necessary to apply this test to imitation. It will be found that not only much of the superstructure of morality but also much of the cement that holds the foundation together is due to imitation. Prof. Royce says ¹ "Our social morality depends in a large measure upon our regard for the will, interests, precepts, and welfare of our

¹ *The Century Magazine*, 26: 141.

fellows. Now this regard is dependent upon our power by imitation to experience and to comprehend the suggested will, interest, and authority about us. Imitation is thus fundamental in the development of conscience." This is true of the individual conscience; the regard for others is extended by experience and becomes the cement of society.

The value of example over precept is well recognized in moral training. There is a vitalizing force in example, not found in precept. The former stays with one, insinuates itself in consciousness in cases of emergency, is more easily used when there is need. Why is this true? One reason for its staying quality is the concreteness of the knowledge thus acquired. But the final test of all knowledge is in its application. Can it be used? Will it be used? It is in the facility with which example may be used that its superior value lies. This tendency and facility in using example consists in the fact that it may be imitated.

Both the strength and weakness of example in moral teaching consist in the ease with which example is controlled. ¹ Preyer points this out in saying "Timid and affected mothers have timid and affected children, for the reason that their own behavior, their frequent startings, outcries, flights, are imitated. In like manner, courageous mothers have courageous children. True, temperament has much to do with this matter, but for teachers imitation is of more value since it may be controlled." Whether we are timid and shrinking or calm, courageous, and self-possessed, depends very largely on the example set by our associates and teachers for us to imitate. That calm demeanor may be imitated is well known. It is also a lamentable fact that Americans do not give sufficient attention to this method of teaching and learning. We are too much given to "jerk and snap," to talk in a high key and to look animated, even excited. ² Prof. James says: "There is only one way to im-

¹ *Infant Mind*, p. 12.

² *Talks to Teachers*, p. 217.

prove ourselves, and that is by some of us setting an example which the others may pick up and imitate till the new fashion spreads from east to west. If you should individually achieve calmness and harmony in your own person, you may depend upon it that a wave of imitation will spread from you, as surely as the circles spread outward when a stone is dropped into a lake. Become the imitable thing and you may then discharge your minds of all responsibility for the imitation."

By reference to Questionnaire III, question (9), it may be seen how large a factor imitation of "calm demeanor" may be. What may be done by imitation of right models is illustrated by the experience of a teacher given in this questionnaire. This is the experience: "I imitated a principal whom I taught under. I had an intense admiration for her self-possession, coolness and tact. I find by forcing myself to be like her I have ceased to be nervous, to talk in a high key, or to antagonize strange or new pupils." So much has been said of example and its possible influence to show how imitation becomes an important element in determining conduct. It should be observed that the value of imitation in molding general behavior measures its value as a method for teaching morality.

In speaking of social influences¹ David Kay says they "may be divided into two kinds, the direct and the indirect. The child instinctively imitates the manner of the teacher, and copies the example of the parent. The influences we unconsciously exert go streaming from us in all directions, though in channels we do not see, poisoning or healing around the roots of society and among the hidden wells of character." The best thing written upon the indirect teaching by the imitation of example, and something every teacher should read, is an article by Huntington² "Unconscious Tuition." He

¹ *Education and Educators*, p. 383.

² *School Room Classics*, I: 5-45.

says "unconscious tuition is that part of a teacher's work which he does when he seems not to be doing anything at his work at all." He sets forth his educational creed on unconscious tuition, or the unconscious teaching that goes to build up good character, in three propositions: (1) "That there is an educating power issuing from the teacher, not by voice or by immediate design, but silent, involuntary, as indispensable to his true work as any element in it; (2) That this unconscious tuition is yet no product of caprice or of accident, but takes its quality from the undermost substance of the teacher's character; (3) That as it is an emanation flowing from the very spirit of his own life, so it is also an influence acting insensibly to form the life of the scholar." The implication here is that the teacher is an example, a model, and that the pupil will imitate him not only consciously, but to an even greater degree unconsciously.

Finally, if we go to the Great Teacher of morality and inquire what was his method for teacher and learner, and seek to find why the world has been charmed for all these centuries, we shall find the method was example in teacher and imitation in followers. Aside from the soundness and the fascination of his doctrine, much of the force of his teaching was due to his method. His more direct teaching was almost wholly by example in the form of parable. His power in the world consists largely in the example of his own life set for our pattern. His method for those who would learn of him may be summed up in his command, "Follow Me." It was no mere play of the imagination that caused ¹ Browning to put these words in the mouth of Tiburzio, the Pisan commander:

"A people is but the attempt of many
To rise to the completer life in one;
And those who live as models for the mass
Are singly of more value than they all.
. . . Keep but God's model safe, new men will rise
To take its mould." . . .

¹ *Luria—a Tragedy.*

In discussing the significance of imitation in education, we have seen some of the work that has been done to bring out this significance, and what some prominent educators have thought of the value of imitation. We have also seen something of the influence and significance of imitation among students in school, in the training of teachers, and in moral teaching. We shall now try to find what value imitation may have in studying language and composition, in getting and using methods for doing things, in the general process of learning—the acquisition of knowledge—and finally point out some of the dangers and limitations of imitation in education. We shall first consider the importance of imitation in the study of language and composition.

The influence of imitation as a factor in developing mind may be seen in the development of language. ¹ Language is a product of social imitation. When we remember that most of our rational thinking is done in language, we may more clearly see how imitation in the development of language is at the same time giving not only the form, but a model of the method and spirit of rational thinking. Without imitativeness there is no language and no higher development of thought in any of us. Only the imitative animal can become rational. ² It may be said that language is at first instinctive in both the lower animals and in man. This instinctive phase consists simply in making sounds. These sounds are changed into language by imitation. The sound or word is associated with certain objects, ideas or images.

The progress in language is largely a matter of defining its early vagueness, by extending, defining, and rendering it more definite and clear. It is a notorious fact, known to all teachers, that progress is rapid, and results good in language just in proportion as the models the child has to imitate are good. It

¹ *The Century Magazine*, 26, 141.

² Tracy, *Psychology of Childhood*, p. 156.

is because imitation plays so large a part in language that the chief difficulty exists in teaching composition and literature. While these subjects are among the most valuable in any course of study, they are also among the most difficult to teach. The reason for this great difficulty is that in most subjects the teacher has a clear field to begin with. The pupil has little or nothing to unlearn. Still more important, the teacher's work as a teacher is not counteracted at every point by bad models imitated. In language, the pupil, on entering school, must unlearn much. This is always a slow and difficult process. Besides, the teacher's efforts to advance the pupil are hindered at every step by bad models in speech and in literature. A distinguished teacher of language of this city recently said in my hearing that his own children made progress in language or failed to do so just in proportion to the time they were associated in play, etc., with those who used good or bad language. What does this mean? It means, as was said above, that the models set for us determine our language and that imitation is the strongest factor. The same thought is expressed when educators say language in our public schools must not be taught by special teachers. Every teacher must teach language. The thought is that the child must have none but good models, must live in an atmosphere of good models, must breathe in and absorb and imitate these models.

✓ And here is found the essential thing in imitation. The model must not be something tacked on to the outside. It must be absorbed, digested, assimilated to be worked out and expressed in intelligent imitation. The matter of substance, some real stuff to think, speak, and write about, is not overlooked. The ideas, the knowledge, must always precede the expression of such ideas or knowledge. Yet, it is one thing to have something to say and it is quite another thing to be able to say that something. It is with the expression that we are now concerned, and it is here that imitation plays its important part in language. Imitation in language is at first

conscious. It requires much effort and much adjustment. Even in the pronunciation of words, much more in finding their exact meaning and definite use, there is much adjustment and adaptation by trial and error. The child often exhibits inventive powers in the modification of words to adapt the sound to ¹what it can pronounce. This is still more noticeable in the use of words when it extends their application to unnamed objects, actions, and qualities. This conscious imitation is notable in adults in learning to write or to compose. Every writer, small or great, builds up his style from the small or great that preceded him.

The value of imitation in teaching composition is too often overlooked. This is especially true of young teachers and still more strikingly manifested in those teachers who have a ready intuition and who have easily developed good literary tastes. This holds not only for teachers of rhetoric and composition, but it may be observed in most teachers who readily acquired their academic training. Such persons usually acquired their training with greater facility because their brains were more plastic, more sensitive to impressions. By virtue of their plasticity of brain, they got their models more easily, imitated them less consciously. They more fully absorbed their models and consequently were not aware of imitating. They did not imitate less but more. It was, however, a higher order of imitation. So it happens that such teachers do some very strange things and teach some very paradoxical doctrine. They say—do not imitate, be original. But they can never tell you how to be original. When they are closely pressed by pupils for an answer to this very puzzling thing, they will say: "Oh, you must just feel it, catch it," and such vague sayings. When translated into descriptive terms, what does this "feeling it" and "catching it" mean? Neither more nor less than unconscious imitation. These teachers would have

¹ Tracy, *Psychology of Childhood*, p. 138.

their pupils absorb their models, saturate themselves, as it were, with the best models. Later they can imitate these models in such a way that it will not appear as imitation. Whatever of individuality, of personality, the pupil may possess will color, reclothe, and tend to remove the too familiar garb of the model. This, however, as we pointed out in discussing the nature of imitation, is the essential characteristic of all the higher forms of imitation.

This same thought of unconscious imitation must have been in the mind of Dr. Johnson¹ when he said: "Whoever wishes to attain an English style, familiar but not coarse, and elegant but not ostentatious, must give his days and nights to the volumes of Addison." In this sentence imitation is quite as implicit as it is made explicit by Prof. Hinsdale.² He says, "the key words to the language-arts are imitation and practice, models and correction. The teacher's practical problem is to correlate the two main ideas that these words express." These two ideas are models and imitation, practice and correction. "Both elements are called for; but models and imitation come first, and they are of the greater value." Walter Raleigh³ says "Imitation of the masters, or some one chosen master, and the constant purging of language by a severe criticism, have their uses not to be belittled." These two passages quoted agree in assigning a prominent place in composition to imitation. In what follows, we shall see that literary men of note did learn to write by imitating the masters.

While Browning never set himself to work to develop a literary style of his own by imitating classic models, his earliest poem "Pauline" is thoroughly saturated with Shelley. Pope

¹ *Lives of the Poets*, p. 248.

² *Teaching the Language Arts*, p. 198.

³ *Style*, p. 125.

built up his style very largely by modifying Dryden. He also imitated Chaucer and others. Johnson¹ says "Pope first learned to write by imitating printed books." Few literary men exhibit more originality than does Tennyson; yet, we need no biography to see how he developed his style. "The Poems by Two Brothers" are Byronic; his prize poem "Timbuctoo" is distinctively Miltonic. Later he imitated Keats and others. However, his later poems are his own. Out of all this imitation came the style Tennysonian. The very admirable style of Defoe² in "Robinson Crusoe" is due to his successful imitation of Bunyan. It is said Bunyan was the first writer to make his style engaging to the reader by a happy mixture of narration and dialogue. Defoe also imitated the same method in his "Moll Flanders." Shelley³ imitated Leigh Hunt in an "attempt to add a familiar levity of style to variety of movement in his metre."

To see more clearly how a literary style may be built up by imitating the masters, let us examine the method of a few men. We shall take Keats, Franklin and R. L. Stevenson. These are chosen not because they are the worst offenders, but because they are regarded as having attained a good literary style of their own, and because we know most about their method. Keats' first attempt to write anything substantial in poetry was his "In Imitation of Spencer."⁴ He got his model from the "Faerie Queene." Spencer's fairyland enchanted him, caused him to breathe in a new world, to become another being. He attempted to imitate it and succeeded. "At first he seems to have worked steadily enough along lines which others had marked out for him." It is clear his

¹ *Lives of the Poets*, p. 374.

² *Autobiography of Franklin* (Cassell's Library), p. 28.

³ Morley's Keats (*English Men of Letters*), p. 32.

⁴ Morley's Keats (*English Men of Letters*), p. 13.

earliest verses were modeled more on modern writers. In his ode "To Apollo" he seems to imitate Gray. The rhythmical form of "Endymion" is due to the example set by Hunt. "The Rimini" is the model. Keats used the "Faerie Queene" and "Rimini" conjointly as models; he tried to embody the spirit of the former in the metre of the latter. By the time Keats was twenty-four, or a little later, he had thrown off most of the eighteenth century stiffness which clung to his earlier efforts. Yet he did not still adopt a vocabulary of his own, full of license. This he caught later from the Elizabethans and from Milton.

A more instructive account is given by Franklin in his *Autobiography*.¹ His first reading consisted largely in polemic literature. This literature was chiefly of the religious kind of which his father's library consisted. This reading gave him a bias for disputation, somewhat dogmatic. The early tendency to dogmatism is discovered and overcome by imitation, as we shall see. In these discussions, it was pointed out to him that he was lacking "in elegance of expression, in method, and in perspicuity." About this time he met with a volume of the *Spectator*. He says, "I read it over and over and was much delighted with it. I thought the writing was excellent, and wished, if possible, to imitate it. With that view I took some of the papers, and making short hints of the sentiments in each sentence, laid them by a few days, and then, without looking at the work, tried to complete the papers again, by expressing each hinted sentiment at length, and as fully as it had been expressed before, in any suitable words that should occur to me. Then I compared my *Spectator* with the original, discovered some of my faults, and corrected them." Here he discovered the need of a stock of words and a readiness to recollect and use them. To overcome this he "took some of the tales in the *Spectator* and turned them into verse;

¹ Cassell's Library Edition, p. 16-21.

and after a time, when I had pretty well forgotten the prose, turned them back again." He sometimes jumbled his collection of hints into confusion, and then, after a time, would endeavor to reduce them to the best order before he began to form the full sentences and complete the subject. "This was to teach me method in the arrangement of the thoughts." He then compared his own arrangement with the original and corrected his faults. How this brought out his own power of expression is seen in this observation. "But I sometimes had the pleasure to fancy that, in certain particulars of small consequence, I had been fortunate enough to improve the method or the language." How he overcame his early acquired dogmatism and developed the habit of expressing himself "in terms of modest diffidence" is seen in his imitation of Socrates. "While I was intent on improving my language," he says, "I met with an English grammar having a sketch on the Arts of Rhetoric and Logic in the Socratic method; later I procured Xenophon's *Memorable Things of Socrates*, containing many examples of the same method. I was charmed with it, adopted it, dropped my abrupt contradictions and positive argumentation, and put on the humble inquirer." He further says, "I continued this method some few years, but gradually left it, retaining only the habit of expressing myself in terms of modest diffidence. This habit has been of great advantage to me." Thus we see Franklin acquired not only an elegance of style, but also a method of thought by means of imitation. His imitation was of a high order and developed in him originality.

The case of Stevenson's learning to write is even more pertinent than that of Franklin's. There are two stages in the development of the style of Stevenson. The value of imitation is brought out by contrasting these two stages or methods. As will be noted later, in the first method, he attempts to store his mind with matter about which to write. Then he tries to give expression to these ideas and thoughts without having in

mind any definite model to give his expression form. In the second method, to which attention is especially invited, he did have models of style before him and consciously tried to imitate them. To bring out the contrast of these two methods and to emphasize the significance of imitation, we can not do better than to give his own account and his observations upon imitation in learning to write.

He says:¹ "I was always busy on my own private end, which was to learn to write. I always kept two books in my pockets, one to read and one to write in. As I walked, my mind was busy fitting what I saw with appropriate words; when I sat by the roadside, I would either read, or a pencil and a penny version-book would be in my hand to note down the features of the scene or commemorate some halting stanzas. Thus I lived with words. It was not so much that I wished to be an author as that I wished to learn to write. Description was the principal field of my exercise, but I worked in other ways also; often accompanied my walks with dramatic dialogues and in writing down conversations from memory and in keeping diaries."

This, as indicated above, was his first plan. It is also the method of teachers of composition, for teachers are usually shy of imitation. Of this first method he says: "This was all very excellent. And yet this was not the most efficient part of my training. Good though it was, it only taught me the lower and less intellectual elements of the art, the choice of the essential note and right word. And regarded as training, it had one grave defect, for it set me no standard of achievement." Let it be observed here that he always kept two books in his pockets; that he was a very zealous reader. It must certainly be admitted that he had some model more or less consciously in mind. The thing of importance is, this was not sufficient in itself. The model must be more clearly

¹ Stevenson's *Memories and Portraits*, pp. 55-64.

defined, and in order to bring out his undeveloped literary powers it is necessary to make an effort to imitate the model.

He continues by saying: "There was, perhaps, more profit, as there was certainly more effort, in my secret labors at home. Whenever I read a book or a passage that particularly pleased me, I must sit down at once and set myself to imitate that quality of propriety or conspicuous force or happy distinction in style. I was unsuccessful and I knew it, but I got some practice in these vain bouts in rhythm, in harmony, in construction, and in coördination of parts. I have thus played the sedulous ape to Hazlitt, to Lamb, to Wordsworth, to Browne, to DeFoe, to Hawthorne, to Montaigne, to Baudelaire, and to Obermann. "Robin Hood," a tale in verse, took an eclectic middle course among the fields of Keats, Chaucer, and Morris. "He says he wrote one early production first in the style of Hazlitt, then after Ruskin, and finally in imitation of Browne." This was the method of Stevenson in learning to write. How successful the plan was, his writings are sufficient testimony.

Let us now note the estimate Stevenson made of imitation in learning to write. In speaking of the method by imitation, he says "That, like it or not, is the way to learn to write. It was so Keats learned, and there never was a finer temperament for literature than Keats's; it is so, if we could trace it out, that all men have learned. Perhaps I hear some one cry out: "But that is not the way to be original!" It is not; nor is there any way but to be born so. Nor yet, if you are born original, is there anything in this training that shall clip the wings of your originality? There can be no one more original than Montaigne, neither could any be more unlike Cicero; yet no craftsman can fail to see how much the one in his time tried to imitate the other. Burns is the very type of a prime force in letters; he was of all men the most imitative. Shakespeare himself, the imperial, proceeds directly from a school. Nor is there anything here that should astonish the considerate.

Before he can tell what cadences he truly prefers, the student should have tried all that are possible; before he can choose and preserve a fitting key of words, he should long have practiced the literary scales," and, he adds, "it is the great point of these imitations that there still shines beyond the student's reach his inimitable model."

I have dwelt at this length on language and composition not only because of their large value in education, but also because of their peculiar fitness to illustrate the educational significance of imitation. The nature of intelligent imitation, its selective nature in choice models, the progressive nature of the model ever becoming more refined, more ideal, could not easily be made more apparent. That so many literary men of originality and genius have made so large use of imitation in the development of their style and method of thought, seems to lend much evidence in favor of a more liberal use of imitation and its methods in other lines of education. The claim has already been made in this paper, and I wish to emphasize it here again, that while imitation in itself is not originality, it is the rational method of developing originality in the individual. It will not bring out more than there is in him; but it will set a bait in the shape of an inviting model that will lure him on to surpass himself and still entice him on to repeat the wholesome process of outstripping himself.

We shall next inquire into the value of method, and try to find what significance imitation has in the acquisition and application of method and in the process of learning. By method, I mean the way of doing things, from learning how to observe, how to put a question to nature or to a child or an adult, how to reach a sound conclusion, up to how to behave, how to act in the presence of new environment. In this sense, the acquisition of method is the most valuable thing that education can furnish the individual or the race. It is true the acquisition of knowledge and of method usually go together, but they are quite distinct and separate things. Much knowl-

edge may be and often is acquired with a minimum of method. In such cases, we have the impracticable man. And here it must be insisted upon that method is not theory. On the other hand, much method may be acquired with a minimum of what is called useful knowledge. Prof. Davis,¹ of Harvard, says science teaching depends for its value upon the method used by the teacher rather than upon the subject matter. Karl Pearson² says, in speaking of the value of science in education, "The unity of all science consists alone in its method, not in its material. The true aim of the teacher must be to impart an appreciation of method and not of knowledge of parts. Personally, I have no recollection of at least 90 per cent. of the facts that were taught me at school, but the notions of method which I derived from my instruction in Greek grammar (the contents of which I have long since forgotten) remain in my mind as a really valuable part of my school equipment for life. The first claim of scientific training, its education in method, is to my mind the most powerful claim it has to state support. The scientific habit of mind is an essential to good citizenship."

Having before us something of the claim and value of method, we may ask: How is method acquired? What influence does the imitative process have in acquiring method? The method is not acquired in quite the same way as knowledge. The former is learned not so much by direct tuition as the latter. The *what* is learned more by precept, the *how* by example. To get a method we must first *see* some one use that method, or we must learn *how* some one used the method. Next, the method must be sufficiently prominent to arrest our attention. Finally, the method must recommend itself as expedient. These are, however, the steps we found to obtain in the imitative process, but when they have once been taken,

¹ *Educational Review*, xiii, 429.

² *Grammar of Science*, Introduction.

imitation is as sure to follow as gravitation is sure to pull down an unsupported body. If we take a type of persons of less plastic brain than that we have supposed, or a case where the method is less prominent or more difficult to acquire, imitation is still the essential factor in learning the method; for under these conditions, the method of work is given the student and it is followed or imitated until its use becomes a habit.

On the formation of this mental habit is based the claim of science in the development of mind. The data in science readily lend themselves to a method that may be often repeated, often imitated. The question may be asked, why does the scientific method have so large value? The answer to this may be found in Mr. Pearson's own experience and observations. The value of the method he got from his teacher of Greek consisted not in the further study of Greek, but in the fact that the method thus obtained could be carried over into other fields of study and of action. The plea made for science in the development of citizenship is not that the citizen may have more knowledge of science, or even continue his study of that subject. It is made *chiefly* on the ground that method obtained in science can be used, imitated, in every sphere of life. Here we may see how important a method of thinking, doing, really is; but what is more pertinent to our subject, we find that method is not only learned by imitation, but also that the application, the general use that may be made of method once acquired, depends upon imitation. The student of science learns how to find and collect data, how to classify the data, and how to eliminate personal bias and to draw sound conclusions. This whole process can be applied, imitated, in the practical affairs of life.

Method as an imitative process is prominent in the acquisition of knowledge. Every teacher who is a close observer finds that many students flounder and fail to get good results from their work because they have not learned how to study.

Very few students discover methods of study for themselves, and many of those who do make such happy hits and lucky finds pay for it dearly in time and energy. Most students get their best methods of study either from their teachers or from their fellow students by imitating. This is noticeable in the university as well as in the lower schools. But, we shall not pursue the matter of method and imitation further. Sufficient has been said to indicate their significance in education. We shall now make inquiry into the nature of the process of learning, to find to what extent imitation contributes to the acquisition of knowledge. This is such a many-sided question that we can not present more than one phase. But, in so far as the subject is dealt with, fundamental elements alone will be considered. The states of mind conducive to learning and some of the activities of mind in the educational process will be briefly reviewed.

Among the states and activities of mind, motive would come first. There must be motive in order to affect the will. By an effort of the will, conscious or unconscious, the mind is brought into a state called attention. By the exercise of attention acquisition and apprehension will result. What has been apprehended and acquired may be reproduced, elaborated, and then appear as thought, understanding, power, character. Motive and attention may be considered under one term—interest. James¹ says, "Whoever treats of interest inevitably treats of attention, for to say that an object is interesting is only another way of saying that it excites attention." Ostermann² is of the same opinion, that interest may be regarded as the exclusive cause of attention. In like manner, in education interest must supply the motive if teaching is to be productive of good results. So, we may inquire, What is interest? How is it secured? All interest depends on feeling, and that

¹ *Talks to Teachers*, p. 100.

² *Interest in its Relation to Pedagogy*, p. 141.

in a twofold sense, either that it is itself a feeling or that it is developed from feeling by means of other psychical processes." It is opposed to indifference and repulsion. This feeling or interest is acquired in one of two ways. Either it is borrowed or the intrinsic nature of the subject matter supplies it. In a given case both borrowed and intrinsic interest may be present, but for our present purpose we shall consider them separately.

Borrowed interest may be illustrated in its purest type in the motive to read a book about which, as to its contents, you know nothing. Some friend or person in whom you have confidence advises you to read a certain book, but tells you nothing about the contents of the book. You immediately make a note of the book, either to be bought or to be secured at the library. This interest in the yet unknown subject matter is lent you. It will cause you to secure the book and will last for some time in beginning to read. Much of the interest in school work, in beginning subjects, and much of the interest in practical affairs is of this kind. It is literally borrowed. A little different variety of the same type of interest is seen, if you are not only asked to read the book but some hint of the contents is also given you. Here the interest is partly borrowed and partly intrinsic. The intrinsic element is present so far as the contents of the book appeals to you; but the interest is chiefly borrowed and remains such until you begin the study and have acquired some clear ideas of the subject matter.

How much of the interest that enables children to do their work in school and out of school is of this borrowed kind, can not be estimated. It is, however, a large element. It is the most economical and rational interest for much of the work to be done in school. This statement is more largely true when this borrowed interest more or less consciously loaned is taken with another form of borrowed interest. This last form is made manifest to the student by the deep and abiding interest of the teacher for the subject. Here the pupil catches

the interest of the teacher, yet it is of the borrowed kind unconsciously controlling the student. Many persons who described their good or favorite, or model teachers in questionnaire III, did so by saying such teachers were interested in their subjects and in their work. Mr.¹ Small makes a valuable contribution upon this point. That teachers might more fully appreciate the value of the interest manifested by themselves, they could well afford to read the testimony given by pupils in this article. The evidence of a number of pupils is given. "244 students say that the attitude of the teacher toward the class and toward the subject taught has made them enjoy or hate the subject. Among the reasons for dislike, lack of interest on the part of the teacher is named 72 times; poor methods 15; personal dislike for pupil 9; lack of enthusiasm 4; incompetency 3; compulsion and sarcasm 1 each." Of those who attribute their growing interest in subjects to the attitude of the teacher they say, "to the teacher's interest in subject 104; his enthusiasm 11; his interest in pupil 5; to systematic suggestion and individual teaching 19." Those teachers who have a mind and heart large enough, can most easily and wisely lend their own interest to pupils, and thus secure the real end and aim of education.

How do pupils come to get the interest of the teacher? Interest, it will be remembered, is feeling. We say feeling is contagious; it is easily caught from other people. This is not only a saying, but it is also a fact common to experience and observation. It need not be dwelt upon here. When we say that feeling, or that kind called interest, is contagious, can be caught from others, we mean it can be imitated. The pupil sees a certain state of mind, of feeling in his teacher. This the student can reproduce in himself. He can and will put himself in a similar state of mind. This process of transference of feeling is imitation; it is borrowing interest. A large,

¹ *Pedagogical Seminary*, iv, pp. 37-42.

and probably the most valuable, part of the teacher's work consists in setting the right kind of a model in this particular. Teachers who do this in a whole-souled manner leave an impress upon their pupils that is of perennial worth.

I do not assert that borrowed interest from teacher to those taught is the final aim of education. The end of education from the standpoint of interest is to give the pupil the power of developing in himself interest of the intrinsic kind. The pupil is to become able to find interest in new subjects, new lines of thought and action. However, I do assert that the intrinsic interest can be developed by means of the borrowed. The new must come out of old. Just as the child's ability to acquire new knowledge is conditioned upon and limited by the old knowledge already in its mind, so new interests are determined by and grow out of the old.

If now we turn from borrowed to intrinsic interest, we shall find that imitation is not so large a factor. But, if we remember that intrinsic interest is developed in any subject only on condition that new and clear ideas come into the experience of the pupil, we shall still find imitation an important factor. It was brought out in another part of the paper that imitation is the means in most cases for obtaining new, clear ideas. It is only when the pupil attempts to reconstruct, to reproduce, to imitate, that all the parts, the unobserved elements, and the new suggestions, come out of the subject or object. It is chiefly by means of imitation that the pupil makes the knowledge a part of his own experience, or really learns something, and acquires new interests. This holds true in natural history and in the sciences, and is generally recognized in methods of teaching these subjects. It also holds true in history and literature, even when the subject is taught from the interpretative standpoint. One citation from Ostermann will bring out my meaning. In speaking of interest in history, he says the facts and events must be colored ¹"with little accessory circum-

¹*Interest in its Relation to Pedagogy*, p. 117.

stances and with concrete particulars, so that the child not only comprehends them with his intellect, but lives them over in his imagination and is moved by them in heart." This statement means the child must reconstruct the events in its own mind, must match idea with idea. It must imitate the whole process by imaging the event. Its understanding of history and its interest in the subject will always depend on how accurately and how easily it can imitate the parts by imaging them. A similar process applies to literature and other kindred subjects. Imitation is the only means in that large part of education where borrowed interest must be relied upon, and it is an essential factor not only in developing but also in maintaining intrinsic interest.

Closely akin to interest is another element in the educational process. This element is what is called sympathy. We have already referred to what Smith calls "sympathetic imitation." The thought contained in the phrase is that imitation is the mode of sympathy. It is the way in which we come into sympathy with another person. ¹"The faculty that imitates conscious states is best denoted by the term sympathy. Sympathy means, literally, being affected with; we sympathize with another when we make his inner experience our own. The expression sympathy has reference to conscious states rather than to external movements. It indicates the mode of relation between conscious persons, which is precisely the relation which constitutes knowledge." The idea here presented is similar to that cited in the method of interest in history and in literature. By sympathy the observer knows the actual mental processes, for he lives them through in his own experience. He does not use his rational faculty as equally cognitive of all forms of experience; he knows the experience of each of the faculties of others by a corresponding faculty in himself. He knows feeling by feeling, sympathy by sympathy,

¹ *Methods of Knowledge*, p. 181.

interest by interest. When we urge that the teacher must be in sympathy with the pupil, we mean the teacher must reproduce the inner experience of the pupil in himself as teacher, to be able wisely to teach the pupil. And when we say the pupil must be in sympathy with the teacher, we mean a similar thing on the part of the pupil. How much depends in teaching upon this sympathetic imitation every good teacher knows, though he may not know the psychological process by which it is brought about. This principle holds not only for relation between pupil and teacher, but quite as well for relation between pupil and subject. However, as was pointed out in interest, this comes largely through the influence of the teachers. Yet, the pupil must not only have an interest in a subject, he must really be in sympathy with it, if he would learn its most valuable lessons. So, here we find the way of knowledge is sympathy; the way of sympathy is imitation.

The final step in the learning process is elaboration. The knowledge acquired in the earlier steps must be elaborated, worked over, to result in power and character. This process is analogous to what we call digestion and assimilation in the physical system. No amount of food taken into the stomach will result in physical and brain energy unless the food is digested and assimilated. Many children and adults literally starve although they take abundant food into the stomach. In like manner, many students store their minds well with facts but never attain efficiency because the facts are not assimilated. The process is stopped short of the real end. It is for this reason that such a hue and cry is so often raised against memory. The reason for this is not that memory is not an essential to mind development, but that the learning process stopped at the memory stage, assimilation did not follow.

In order to find what part imitation plays in assimilation, let us inquire into the nature of assimilation in learning. What are the conditions under which knowledge is assimilated?

lated? A few quotations will bring out the point. ¹ "The preparation of the child's mind for a rapid and effective assimilation of new knowledge, and the presentation of the matter of instruction in such order and manner as will best conduce to the most effective assimilation, is the first step in teaching." This statement of the simpler stages of assimilation is also presented in our modern notion of apperception. ² "Apperception may be roughly defined at first as the process of acquiring new ideas by the aid of old ideas already in the mind." In good teaching assimilation occurs at every step. In these statements the simpler forms of assimilation are made prominent, such as is found chiefly in acquisition. The highest type of assimilation is manifested only in the inductive process, in generalizations. ³ "The mind must ever rise from clear individual to distinct general notions." To get our bearings in mind before these statements are examined, let us note what Rosenkranz says on the act of learning. ⁴ "In the process of instruction," he says, "the interaction between pupil and teacher must be so managed that the exposition by the teacher shall excite in the pupil the impulse to reproduction. The didactic exposition will, through its perfect adaptation, call out the imitative instinct, the powers of new creation." Let us now try to find how imitation functions in these acts of learning.

Why should we prepare the pupil's mind for the presentation? Why should the old be brought into consciousness and vivified in order to acquire the new? It is usually said the purpose is to enable the pupil to interpret the new in terms of the old. Rosenkranz's term "reproduction" comes more near to expressing the real act. The mind is prepared for instruction

¹ De Garmo's *Essentials of Method*, p. 46.

² McMurry's *General Method*, p. 176.

³ *Essentials of Method*, p. 78.

⁴ *Philosophy of Education*, p. 113.

by preparing a copy, a model, out of the old, so that the pupil may reproduce, may imitate, in terms of this model. Baldwin says, on this point, ¹ "The principle of assimilation clearly illustrates not only that a copy-image may be so strong and habitual in consciousness as to assimilate new experiences to its form and color, but also that this assimilation is the very mode and method of the mind's digestion of what it feeds upon. We may say that assimilation is due to a tendency of a new sensory process to be drawn off into performed motor reactions; these performed reactions in their turn tending to reinstate, by the principle of imitation, the old stimulations or memories which led to their performance, with all the associations of these memories. These memories, therefore, tend to take the place or stand for the new stimulations which are being thus assimilated." Thus one may see that an essential characteristic of assimilation is the imitative function of mind, and this function is present in all the forms and grades of assimilation; in some more, in others less.

Finally, does imitation form any part of induction and generalization? What was given under scientific method and its value in education, would answer this in the affirmative. But that is not the whole value of imitation in generalization. If we follow ² Dr. Harris, we shall find that the syllogism is not only closely related to apperception and to induction, but that it is also the basis for generalizations. It is the mold in which particular notions are fashioned into general notions. It is the model after which generalizations are patterned. When once the model is learned and fixed in the mind, the process of forming general notions and conclusions is simply a reproduction, and imitation of the model.

There is still another sense in which imitation is prominent in learning. Prof. James makes the point that ³ "Imitation

¹ *Mental Development*, pp. 308-311.

² *Introduction to the Study of Philosophy*, pp. 96-125.

³ *Talks to Teachers*, pp. 49-55.

shades imperceptibly into emulation. Emulation is the impulse to imitate what you see another doing, in order not to appear inferior. Emulation is the very nerve of human society, and in the school room, imitation and emulation play absolutely vital parts. The teacher who meets with most success is the teacher whose own ways are the most imitable. The classic example of such a teacher is Dr. Arnold of Rugby. It may be said that the feeling of rivalry lies at the very basis of our being, all social improvement being largely due to it." Most of the work of the world is done through this stimulus. It should be remembered there is a generous kind of rivalry, as well as a spiteful and greedy kind. However, even the fighting impulse must often be appealed to. "It is nonsense to suppose that every step in education can be interesting." Yet, the most wholesome kind of emulation is such as Stevenson exhibited. He says "I learned to write (that is, compose) in a wager with myself." It is well sometimes to "rouse the pupil's pugnacity and pride, and he will rush at the difficult places with a sort of inner wrath at himself that is one of the best moral faculties. A victory scored under such conditions becomes a turning-point and crisis of his character. It represents the high-water mark of his powers, and serves thereafter as an ideal pattern for his self-imitation." It should be observed here that imitation in this sense is not a process in learning but rather an incentive for learning.

It must be observed that there are many dangers and limitations of imitation. It is not supposed for a moment that the imitative method is to be a panacea for all the ills of education. Imitation is subject to the same dangers and abuses incident to any other method of securing mind activity. The abuse of memory work has already been referred to. The abuse of imitation may be likened to that of memory. If only the lower, more mechanical elements are called into play, imitation will be of little value and may prove harmful. The whole round of mental activity, from observation to execution,

must be exercised. In imitation as in any other efficient method of teaching, danger is always close at hand. Folly and prudence, blunder and skill, are always next-door neighbors. This tendency to over-emphasize "the new" is seen in science where "method" is the chief thing of value. However, this truth is no sooner recognized than the folly of "All is in all" appears. It is also manifested in the adherents of the "worth-whileness" doctrine. Useful knowledge is here the means and aim; the value of the subject-matter to develop mind is neglected; the capacity of the learner over-looked; or the work degenerates into the too common-place—what the child already knows or will know at the right time without waste of time and energy in school to teach such knowledge.

The more apparent dangers of imitation will be found in the model, in the motive, and in the method. The results as shown in questionnaires I and II indicate, and observation and experience prove, that many persons are quite as much disposed to imitate bad models as to imitate good models. ¹ Warner points out that great care should be exercised to avoid the daily contact of over-mobile, hysterical, stammering children with other children of mobile or nervous temperament. The latter, though not given to the infirmities of the former, will soon acquire them through imitation.

A still greater danger lies in the motive for imitation. The motive may be wise or silly. If the motive for imitation is to get new ideas, a better method of doing work, to suggest or express a new idea, thought or feeling, it is on the whole good; if, on the other hand, it is for the purpose of display, of deception, of shirking, it is bad. It has been truthfully said that man is by nature lazy. Recently, one of the papers interviewed a number of the prominent business men of this city, to get their opinions on why so many young men fail to secure and

¹ *Mental Faculty*, p. 129.

hold good positions, and to be promoted to better positions. The answers were all summarized in the single term "laziness." There is much danger that imitation may be prompted by laziness, because the chief merit of imitation is that it is an easier, surer way of getting results. This will tend to make it popular with the indolent; it should be carefully guarded against by teachers. This danger of motive to shirk work and responsibility applies to both teacher and pupil. There is no more prevalent sin among teachers than the tendency to let things settle down into cut and dried methods of teaching. It requires no small amount of labor and effort on the part of the teacher to hold up the hands of the pupils, to keep things well alive, and to avoid "the line of least resistance," even when that course is harmful. Owing to laziness, or indifference, teachers too often come to the conclusion that pupils are dull when they are really only in need of the right kind of stimulus and encouragement to wake them up. The danger here is of being satisfied with too low grade of imitation, with too mechanical work. The good teacher should always be slow to conclude that any pupil can not be more than a mere copyist.

The danger in the method of imitating consists largely in not giving the pupil sufficient freedom. The pupil must not only have some freedom in the choice of model, but he must have almost absolute freedom in imitating such models. It is only when the child enjoys such freedom that the imitative process can bring out and develop whatever of talent he may possess. Imitation is a process for putting the child in conscious possession of its own powers, not those of any other person. If it is to serve its proper function, it must develop the individuality of the child, let that individuality be much or little. To develop this, the teacher must encourage the pupil, keep him hopeful. The *reach* of the pupil must ever be higher than his *grasp*.

It must also be remembered that imitation has well defined

limitations. It can not create brain power, nor a faculty of mind. The most it can do is to develop the faculties which the pupils possess. It can not make indifferent teachers enthusiastic and interested in their work; nor can it cure sluggishness in disposition and laziness in either pupil or teacher.

Let us now summarize what the evidence in this paper seems to indicate. Imitation has its origin in instinct. Both the lower animals and mankind have an instinctive tendency to imitate. This instinctive tendency in human beings develops with intelligence and tends to become a faculty—the ability to imitate. The ability to imitate is a characteristic distinguishing man from the lower animals. This ability gives rise to and makes originality possible; in all invention and discovery, excepting such invention and discovery as is achieved by accident—either by a happy hit or a lucky find through long continued trial and error—imitation is an essential factor. In considering the scope of imitation, we found that the tendency and ability to imitate are ever present influences in human affairs and in human conduct. We saw that imitation has been prominent in historical events of the world; that it is present in art, in science, in society, in religion, and in government.

The significance of imitation was pointed out in some of its more fundamental relations to education. Pupils in school imitate their fellow-students and their teachers. Both good models and bad models are imitated; each of the four questionnaires goes to prove this fact. The fact that these models and the tendency to imitate them are permanent possessions of pupils is sufficiently well shown in training teachers, and manifested later in their methods of school work. The evidence seems to show that failure to recognize the influence and the value of imitation has been the occasion of much inefficiency in teaching, and has resulted in much waste of time and energy in the training of teachers. Many teachers have had their efficiency greatly impaired by the influence of bad

models under whom they received their academic and professional knowledge. Some teachers relapse, after good training, into bad methods absorbed in early education. The progress of those who do become efficient teachers is rendered more slow and difficult. It was also pointed out that if the imitative tendency and ability of students were properly utilized, the long apprenticeship in training-schools might be shortened; that the emphasis in the training of teachers should be placed upon model school work seen and upon the subsequent criticism and discussion of the model teaching; that the proper function of pupil teaching is to bring out and emphasize what models should be imitated.

It was also shown that much of motive and interest necessary to good work in school is due to imitation. This interest either has its origin in imitation or else imitation is the only means for the transference of this interest to pupils. Moral teaching, the learning of language, the acquisition and application of method, the whole of the learning process depend in no small degree upon imitation for rapidity, facility, certainty. The influence of imitation in these processes illustrates what may reasonably be claimed for it in other lines.

The real worth of imitation in education consists in the self-activity it occasions. It calls into exercise all the powers of mind, from the acquisition of sense-knowledge to the development of will-power and of skill in doing. The expediency or economy of imitation in education consists in the fact that the imitative method takes full cognizance of all the race has inherited from the past, and it builds upon this inheritance in developing the mind of the child. Imitation begins this development by putting the child into conscious and intelligent possession of the achievements of the race in a more economical and rational way. The imitative method of learning discloses the vanity and the inanity of requiring the child to invent and rediscover what the race has already invented or discovered. By this imitative method the child would verify through

imitating what has already been achieved, and thus shorten and facilitate the learning process. By this means of verification, the child will the sooner have an intelligent basis, an apperceiving mass of knowledge for future acquisition, and more energy, free to pursue and achieve new thought, invention, and discovery.

The principles of imitation are in perfect accord with the more fundamental principles of education. "Seeing and doing" and "learning to do by doing," are axiomatic ways of stating the imitative process in learning. No better directions could be given for the imitative process than this principle of education: "Let no task be assigned until the method of doing it has been explained;" unless we add to this principle, until the method of doing it *has been seen* and *explained*. To say "Proceed from the known to the related unknown," is to say, go by the way of imitation; for the sum and substance of imitation in education consists in its building up knowledge, power, and skill out of what either the individual or the race has already achieved.

Finally, it devolves upon teachers to see that pupils have the best models before them; that the pupils understand and appreciate these models; that there be freedom to change and modify these models; that pupils have, in using these models, right motives, high ideals—to excel the model itself, to do what they had not been able to do before, to outstrip, surpass themselves.



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